

**United States Court of Appeals  
for the Federal Circuit**

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MONDIS TECHNOLOGY LTD., HITACHI MAXELL, LTD.,  
nka Maxell Holdings, Ltd., MAXELL, LTD.,

*Plaintiffs-Appellants,*

— v. —

LG ELECTRONICS INC., LG ELECTRONICS USA, INC.,

*Defendants-Cross-Appellants.*

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*On Appeal from the United States District Court for the  
District of New Jersey in No. 2:15-cv-04431-SRC-CLW  
Honorable Stanley R. Chesler, Judge*

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**NON-CONFIDENTIAL BRIEF FOR PLAINTIFFS-  
APPELLANTS**

JEFFREY B. PLIES  
DECHERT LLP  
515 Congress Avenue, Suite 1400  
Austin, TX 78701  
(512) 394-3000  
jeffrey.plies@dechert.com

MARTIN J. BLACK  
JEFFREY S. EDWARDS  
BRIAN M. GOLDBERG  
DECHERT LLP  
Cira Centre  
2929 Arch Street  
Philadelphia, PA 19104  
(215) 994-4000  
martin.black@dechert.com  
jeffrey.edwards@dechert.com  
brian.goldberg@dechert.com

*Counsel for Plaintiffs-Appellants*

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U.S. Patent No. 7,475,180

14. A display unit for displaying an image based on video signals inputted from an externally connected video source, comprising:

a video circuit adapted to display an image based on the video signals sent by the externally connected video source;

a memory in which at least display unit information is stored, said display unit information including an identification number for identifying at least a type of said display unit and characteristic information of said display unit; and

a communication controller capable of bi-directionally communicating with said video source;

wherein said communication controller is capable of communicating said display unit information other than said characteristic information to said video source.

15. The display unit according to claim 14, wherein said display unit information is sent to said video source in response to power on of at least one of said display unit and said video source.

**UNITED STATES COURT OF APPEALS  
FOR THE FEDERAL CIRCUIT****CERTIFICATE OF INTEREST**

**Case Number** 23-2117 (lead); 23-2116

**Short Case Caption** Mondis Technology Ltd. v. LG Electronics Inc.

**Filing Party/Entity** Appellant/Mondis Technology Ltd., Hitachi Maxell, Ltd., n/k/a Maxell Holdings, Ltd.; Maxell, Ltd.

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Date: 9/19/2023

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Name: Martin J. Black

<b>1. Represented Entities.</b> Fed. Cir. R. 47.4(a)(1).	<b>2. Real Party in Interest.</b> Fed. Cir. R. 47.4(a)(2).	<b>3. Parent Corporations and Stockholders.</b> Fed. Cir. R. 47.4(a)(3).
Provide the full names of all entities represented by undersigned counsel in this case.	Provide the full names of all real parties in interest for the entities. Do not list the real parties if they are the same as the entities.  <input type="checkbox"/> None/Not Applicable	Provide the full names of all parent corporations for the entities and all publicly held companies that own 10% or more stock in the entities.  <input type="checkbox"/> None/Not Applicable
Mondis Technology Ltd.	Mondis Technology Ltd.	Inpro Ltd.
Hitachi Maxell, Ltd., n/k/a Maxell Holdings, Ltd.	Hitachi Maxell, Ltd., n/k/a Maxell Holdings, Ltd.	None
Maxell, Ltd.	Maxell, Ltd.	Maxell Holdings, Ltd.

☐ Additional pages attached

**4. Legal Representatives.** List all law firms, partners, and associates that (a) appeared for the entities in the originating court or agency or (b) are expected to appear in this court for the entities. Do not include those who have already entered an appearance in this court. Fed. Cir. R. 47.4(a)(4).

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Joseph J. Gribbin (no longer with firm)	Robert L. Masterson (no longer with firm)	Teri-Lynn A. Evans (no longer with firm)
Vincent A. Gallo (no longer with firm) Heidi Guetschow (no longer with firm)	Ireland, Carroll & Kelley, PC Otis Carroll James Patrick Kelley	

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☒ None/Not Applicable

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#### CONFIDENTIAL MATERIAL OMITTED

The material redacted from this brief is subject to a protective order. The confidential information on pages 3, 4, 12-15, 18, 23, 33, 39, 40, 44, 64 and 65 relates to Hitachi’s and Mondis’ confidential license agreements with the Defendants-Cross-



Appellants and third parties, including the confidential terms of three such licenses, the number of licenses, and the identity of several third party licensees, which has been designated as confidential.

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## **STATEMENT OF RELATED CASES**

In Case No. 2020-1812, LG Electronics, Inc., and LG Electronics U.S.A., Inc. (“LG”) (Defendants-Cross-Appellants here), brought an interlocutory appeal under 28 U.S.C. § 1292(c)(2) of liability issues arising from the 2019 trial. On the motion of Plaintiffs-Appellants Mondis Technology, Ltd., Hitachi Maxell, Ltd., n/k/a/ Maxell Holdings, Ltd., and Maxell, Ltd. (collectively “Mondis”), this Court dismissed the appeal as untimely and denied rehearing. D.E. 68, 69, and 82. No cases could directly affect or be affected by this Court’s decision in this appeal.

## **JURISDICTIONAL STATEMENT**

The district court had subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a), and appellate jurisdiction exists under 28 U.S.C. §§ 1291 and 1295(a)(1). Mondis filed a notice of appeal on June 1, 2023 (Appx692-698), and an amended notice on June 16, 2023. Appx699-704.

## **STATEMENT OF THE ISSUES**

1. Whether the district court erred in vacating the original \$45 million damages verdict based on the erroneous view that a license to a family of continuation patents cannot be comparable to a license for a single patent in the family, when this Court approved far broader theories of comparability in *Vectura Ltd. v. Glaxosmithkline LLC*, 981 F.3d 1030 (Fed. Cir. 2020), *Bio-Rad Labs., Inc. v. 10X Genomics Inc.*, 967 F.3d 1353 (Fed. Cir. 2020), and *Elbit Sys. Land and C4I Ltd. v. Hughes Network Sys.*, 927 F.3d 1292 (Fed. Cir. 2019)?

2. Whether the district court erred in creating a “no new evidence” rule for the damages retrial, which barred the admission of any evidence not admitted at the first trial in violation of Fed. R. Evid. 402—even though the court had altered the relevant legal landscape by doing an about-face on Mondis’ apportionment theory—and then refused to award post-trial relief in part on that basis?

3. Whether the district court erred in denying Mondis’ motion for enhanced damages under 35 U.S.C. § 284?

4. Whether the district court erred in denying Mondis’ motion for attorneys’ fees under 35 U.S.C. § 285?

5. Whether the district court erred in denying Mondis prejudgment interest under 35 U.S.C. § 284 at the prime rate, compounded annually from the date of first infringement?

## **INTRODUCTION**

As the jury in this case correctly determined, LG *willfully* infringed Mondis’ patent. Likewise, before trial, the district court correctly resolved the pertinent *Daubert* issues, and the parties presented their respective cases based on that resolution. In a determination well-grounded in the evidence, the jury awarded Mondis \$45 million in damages. After the verdict, however, the district court did an about-face on its *Daubert* rulings, fundamentally altering the relevant legal

landscape on which Mondis had constructed its trial strategy, and ordered a retrial. Appx220-252; Appx255-263. Rather than permit Mondis to adjust its strategy based on the new legal landscape, the district court instead insisted that the parties repeat nearly exactly their previous presentations, which had been tailored in light of the court's prior *Daubert* rulings. Appx443-444. After retrial, the jury awarded Mondis \$14.3 million. Following this verdict, the district court did another about-face—whereas it had previously accepted the first jury's finding of LG's willfulness, it denied Mondis' post-judgment motions in part based on its conclusion that LG had acted in good faith. Appx509-527. On appeal, Mondis seeks the correction of these and other errors.

This case relates to U.S. Patent No. 7,475,180 (the "'180 patent"), invented in the early 1990's at Hitachi<sup>1</sup>. The patent describes a communication link between a video source and a display that enables the video source to automatically generate optimal video signals for the display, commonly referred to as "Plug and Play." The '180 invention was ultimately embodied in several industry standards.

MONDIS-LG AGM

Hitachi and Mondis negotiated [REDACTED] prior licenses to the Plug and Play patents.

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<sup>1</sup> In this brief, "Hitachi" refers to Hitachi, Ltd., the original applicant and owner of the '180 and related DDC patents, and the ultimate parent of the international Hitachi family of companies, as well as all Hitachi companies collectively.



One of those licenses at the center of this litigation is a 2009 license between the parties over the same patents and the same technology, in which LG agreed to pay over \$9 million for a license for its computer monitor business. While LG also put the technology in its televisions, a much larger business, it refused to take a television license, and Mondis brought this suit.

Parsing the extensive licensing evidence, the parties' damages experts performed *Georgia-Pacific* analyses using the comparable agreements in the hypothetical negotiation. Both experts started with the <sup>MONDIS-LG AGM</sup> rate for the two patent families covered by the Mondis-LG agreement, which the parties called the "DDC/2B" and "DDC/CI" families, after the names of the two relevant industry standards.<sup>2</sup> The '180 patent was a member of the DDC/2B family. The experts therefore apportioned out the value of the DDC/CI family and agreed that the rate for the DDC/2B family alone was 0.25%. That was also the normal rate across the television licenses in the licensing program for use of the DDC/2B family.

Mondis' expert then considered the structure of the prior licenses, which charged the same rate for a product that infringed the '180 patent as for a product

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<sup>2</sup> In this brief, the patent-in-suit will sometimes be referred to as a "Plug and Play," "DDC" or "DDC/2B" patent; and the family of which it is a part will sometimes be referred to as the "Plug and Play," "DDC" or "DDC/2B" family.

that also infringed additional DDC/2B family members. This is a typical arrangement in the real world and is termed “threshold” (or, more broadly, “package” or “bundle”) licensing. Once there is a patent of sufficient value, the licensor is compelled to throw in the rest for free. Here, the additional patents were closely-related continuations, all issuing off the same specification. In light of the evidence, Mondis’ expert concluded that no additional rate apportionment was required, applied the remaining *Georgia-Pacific* factors, and gave an ultimate opinion that the reasonable royalty was \$76.1 million.

LG’s expert, on the other hand, applied “patent counting,” taking the 0.25% and dividing it by the number of potential litigation patents in the family to reduce the rate, regardless of the fact that all of the patents were closely-related and that the ’180 patent was the most important for televisions. At *Daubert*, LG sought to impose the patent counting methodology as a matter of law and moved to exclude Mondis’ expert for failing to adopt it. Mondis argued that all of the licenses were negotiated on the one-price-per-family, threshold basis, including the Mondis-LG agreement; that licensing continuation patents for the same price as a base patent was commercial practice; and that the dispute presented a fact question for the jury. The district court called in both experts to testify live and then denied LG’s motion.

The case proceeded to a bifurcated trial in April 2019. Mondis prevailed on liability. At the damages trial, the jury rejected Mondis' full damages request, but awarded \$45 million in damages. The jury also found that LG's conduct was willful.

On post-trial motions, the district court upheld the liability and willful infringement verdicts but reversed its *Daubert* ruling, holding that as a matter of law, a license to a patent family is not comparable to a license to a single patent in the family, even the most important patent in the family, without further apportionment. Appx231-234. The district court also found that Mondis' hypothetically-negotiated license to the '180 patent would be worthless to LG because Mondis could sue on its other patents after the '180 patent dispute was resolved. Appx236. On this basis, the district court vacated the original jury award and ordered a new damages trial.

Thereafter, this Court issued opinions in *Vectura Ltd. v. Glaxosmithkline LLC*, 981 F.3d 1030 (Fed. Cir. 2020) and *Bio-Rad Labs., Inc. v. 10X Genomics Inc.*, 967 F.3d 1353 (Fed. Cir. 2020), both following *Elbit Sys. Land and C4I Ltd. v. Hughes Network Sys.*, 927 F.3d 1292 (Fed. Cir. 2019). These decisions support the licensing analysis presented to the jury but later rejected by the district court. Mondis called these cases to the attention of the district court in a motion for

reconsideration and in *Daubert* opposition briefing, but the district court rejected their relevance. Appx254 (re *Elbit*); Appx298-301 (re *Vectura* and *Bio-Rad*).

For the damages retrial, the district court imposed *sua sponte* a “no new evidence” rule—even though the court had altered the relevant legal landscape by reversing the *Daubert* ruling on Mondis’ apportionment theory—requiring the witnesses to repeat their testimony from the first trial without expansion of any kind. Appx443-444. Counsel were essentially instructed to repeat their direct and cross-examinations. Appx446. Even documents listed as exhibits in the pre-trial order but not introduced at the first trial were barred from the second trial. Given these restrictions, Mondis was unable to produce a supplemental damages opinion that addressed the district court’s apportionment views but also its “no new evidence” rule. The district court struck Mondis’ expert.

The district court held a damages retrial in February 2023. Mondis was permitted to recall witnesses from the first trial, including LG’s damages expert, but all testimony was limited to that given at the first trial. The district court also barred Mondis from arguing a specific damages quantification to the jury. The jury awarded Mondis \$14.3 million, significantly more than the \$1.9 million LG’s expert opined was appropriate.

The district court denied LG's post-retrial JMOL motion and also denied Mondis' motion for enhanced damages and attorneys' fees, electing to give no effect to the willfulness verdict. Appx508-527; Appx531-545. While after the first trial, the district court ruled that LG had infringed the patent intentionally, now the district court ruled that LG had acted in good faith. Appx514-515; Appx519; Appx522-523. The district court then denied Mondis' motion for prejudgment interest at the prime rate, compounded, which is the prevalent rate in the Third Circuit, and excluded five years of pre-suit interest when the parties were negotiating a license on the ground that Mondis had engaged in "strategic delay" that was unevicenced in the record. Appx527-531. The T-Bill rate simple interest the district court did award appears to be the lowest rate awarded in a Third Circuit patent case in the last decade.

On appeal, Mondis seeks reversal of the order awarding a new trial and reinstatement of the \$45 million award. The district court's initial *Daubert* rulings were correct, and the post-trial rulings misapplied Federal Circuit precedent. The damages errors and the unsupported "no new evidence" rule must have affected the district court's determinations on enhancement, attorneys' fees and interest. This Court should instruct the district court to consider those issues anew in their correct legal context.

## **STATEMENT OF THE CASE AND FACTS**

### **A. The Parties**

Mondis is a UK-based company and subsidiary of Inpro, Ltd., which served as a patent licensing agent of Hitachi in what became known as the “DDC” program, a reference to an industry standard relating to communications between a display and video source. Appx1300; Appx20100 (Spiro Tr. 100:2-16). In 2007, Mondis acquired Hitachi’s patents in the area, including an application that matured into the ’180 patent. Appx15070-15101. Hitachi Maxell, Ltd., now known as Maxell Holdings, Ltd., is the successor to Hitachi Ltd.’s rights, and Maxell Ltd. is its operating company. Appx1303; Appx17143-17146; Appx20102-20103 (Spiro Tr. 102:5-103:2); Appx20107-20108 (Spiro Tr. 107:9-108:10).

### **B. The Patent-in-Suit**

The ’180 patent issued directly to Mondis on January 6, 2009, and is titled “Display Unit with Communication Controller and Memory for Storing Identification Number for Identifying Display Unit.” Appx15001; Appx20097 (Spiro Tr. 97:4-5). The patent teaches storing identification numbers and characteristic information about a display in a memory. Appx15001-15032; Appx20288-20291 (Lamm Tr. 288:2-291:4). This display unit information can then be communicated to an attached video source (*e.g.*, computer, set-top-box,

DVD player) using a communication controller. Appx20284 (Lamm Tr. 284:14-18); Appx20289 (Lamm Tr. 289:3-8); Appx20291-20292 (Lamm Tr. 291:5-292:5). The video source can then generate compatible video signals using this information, a feature known as Plug and Play (or “PnP”). Appx20286-20288 (Lamm Tr. 286:17-288:1); Appx20292 (Tr. 292:6-9). The ’180 invention has been incorporated into several industry standards. Appx20336 (Lamm Tr. 366:6-18); Appx21034 (Tr. 1034:6-19).

The invention provides user benefits such as automatic configuration, the ability to obtain an optimal picture, and increased interoperability. Appx21026-21028 (Lamm Tr. 1026:7-1028:4). The invention is a commercial necessity for display makers, and their implementation of it makes their displays easy to use, facilitates a good reputation among customers, and reduces calls to technical support. Appx21033-21034 (Lamm Tr. 1033:2-1034:1); Appx21035 (Lamm Tr. 1035:5-17).

The ’180 patent belongs to a family of several related patents issuing off the same specification, and is subject to terminal disclaimers over other family patents. Appx1313-1317. These were collectively referred to as the “DDC/2B” (display data channel/bidirectional) patents during the licensing program. Appx20109 (Tr. 109:8-20). The ’180 patent is the most important because it is the only member

that provides the type of display unit information necessary for generating compatible video signals and implementing Plug and Play. Appx21036-21038 (Lamm Tr. 1036:6-1038:21); Appx21040-21041 (Lamm Tr. 1040:23-1041:8).

**C. Mondis/Hitachi Licensing Program for the DDC Patents, Including the '180 Patent**

In the late 1990s, Hitachi began a highly successful program to license the patents relating to the DDC standard to makers and sellers of computer monitors, and, in the mid-2000s, televisions. Appx20099-20100 (Spiro Tr. 99:17-100:16); Appx20101-20102 (Spiro Tr. 101:19-102:4); Appx20108-20111 (Spiro Tr. 108:14-111:6). Mondis' affiliate Inpro was Hitachi's licensing agent, licensing these patents for Hitachi's account until 2007, when Mondis bought the patents and began its own licensing and enforcement program. Appx20102 (Spiro Tr. 102:5-9); Appx20105-20107 (Spiro Tr. 105:19-107:8).

The licensing program was originally based on a standard, pre-litigation rate<sup>3</sup> of 1% of the accused product's sales price, for both the DDC/2B family and

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<sup>3</sup> "Pre-litigation" refers to rates in real-world patent license negotiations which are discounted because of the uncertainty of patent validity and infringement. Appx21008 (Spiro Tr. 1008:14-19). By contrast, the *Georgia-Pacific* hypothetical negotiation assumes validity and infringement. The "pre-litigation" rate is the uncertainty discounted rate that needs to be increased to establish hypothetical negotiation comparability. See Appx21003-21004 (Spiro Tr. 1003:15-1004:4);



its related DDC/CI<sup>4</sup> family. Appx20965 (Spiro Tr. 965:9-15); Appx20967-20968 (Spiro Tr. 967:21-968:13). Later, the program added an alternative where the two families could be licensed separately—0.25% for DDC/2B monitors and 1.75% for DDC/CI monitors. Appx20970 (Spiro Tr. 970:3-11). These normal, pre-litigation rates are reflected across the Hitachi and Mondis DDC licenses. For example, the 2009 Mondis-LG monitor license expressly states that the <sup>MONDIS-LG AGM</sup> [REDACTED] per-unit running <sup>MONDIS-LG AGM</sup> monitor royalty was based on a [REDACTED] rate applied to a \$126 average selling price, subject to adjustments. Appx15062.

Because televisions generally incorporated DDC/2B plug-and-play technology but not DDC/CI, the normal pre-litigation royalty for televisions became the 0.25% DDC/2B rate. Appx21970 (Spiro Tr. 970:3-21); Appx20987 (Spiro Tr. 987:2-20); Appx21079-21080 (Bratic Tr. 1079:15-1080:18). This 0.25% is the rate that both Mondis' damages expert, Mr. Bratic, and LG's damages expert, Mr. Hansen, used as the starting point for their hypothetical negotiation analyses under the *Georgia-Pacific* factors. Appx21079-21081 (Bratic Tr.

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Appx21004-21005 (Spiro Tr. 1004:25-1005:23); Appx21008 (Spiro Tr. 1008:14-19); Appx17122-17124.

<sup>4</sup> The DDC/CI patents enabled the control of a display from a keyboard, a feature that computer monitors came to have but that televisions do not have. Appx20967-20968 (Spiro Tr. 967:21-968:6); Appx20970 (Spiro Tr. 970:12-14).

1079:15-1081:1); Appx21100 (Bratic Tr. 1100:4-15); Appx21198-21199 (Hansen Tr. 1198:11-1199:9); Appx21214 (Hansen Tr. 1214:3-14).

Hitachi and Mondis licensed the patents at a single rate, regardless of the number of patents the accused products infringed. Appx20966-20967 (Spiro Tr. 966:1-967:9); Appx20968-20969 (Spiro Tr. 968:14-969:1); Appx21074-21078 (Bratic Tr. 1074:16-1078:3). The price for the single best patent was 0.25% for the DDC/2B family alone, and the licensee would have no additional price to pay for

use of any further patent(s) by the same product. This is illustrated in the prior

Mondis-LG agreement for monitors, wherein <sup>MONDIS-LG AGM</sup> [REDACTED] patents may <sup>MONDIS-LG AGM</sup> [REDACTED] and others <sup>MONDIS-LG AGM</sup> [REDACTED] but neither would <sup>MONDIS-LG AGM</sup> [REDACTED] the <sup>MONDIS-LG AGM</sup> [REDACTED]. Appx15040 (§ 1.6); Appx15041 (§ 1.12); Appx15046 (§§ 5.8, 5.9); Appx21075-21077 (Bratic Tr. 1075:15-1077:9). Similarly, an LG product that infringed only one patent would require the same full royalty as a product that infringed all of them, which even LG's expert Mr. Hansen acknowledged. Appx21225 (Hansen Tr. 1225:8-13); Appx21226 (Hansen Tr. 1226:10-25). Mondis' negotiator of the prior licenses (Mr. Spiro) and its damages expert (Mr. Bratic) testified that this "threshold" licensing structure is common and is soundly supported by real-world business considerations. Appx20966-20967 (Spiro Tr. 966:1-967:20); Appx20968-20969 (Spiro Tr. 968:14-969:1); Appx21074-21078 (Bratic Tr. 1074:16-1078:3).

By the time of the 2019 trial, Hitachi and/or Mondis had executed [REDACTED] prior license agreements covering the DDC/2B and DDC/CI families. Appx20106-20107 (Spiro Tr. 106:24-107:1).

**D. Mondis' 2007 Litigation Against LG, TPV, Hon Hai and Innolux**

In 2007, Mondis sued the largest remaining unlicensed suppliers, LG, TPV, Innolux and Hon Hai. *Mondis Tech., Ind. v. LG Electr. Inc. et. al*, Case No. 2:07-cv-565-TJW-CE (E.D. Tex.), D.E. 1, Dec. 31, 2007 (complaint). When the '180 patent issued in January 2009, it was added to the litigation. Appx1475-1492; Appx15001; Appx15104-15111. Mondis provided LG infringement notice specifically for its televisions on April 2, 2009. Appx20114-20117 (Spiro Tr. 114:11-117:14); Appx1318-1319.

In September 2009, Mondis settled with LG through an agreement covering LG's infringing computer monitors. Appx15033-15062; Appx20111 (Spiro Tr. 111:7-23); Appx20119 (Spiro Tr. 119:12-16). To expedite settlement, both parties agreed to execute the license for computer monitors and to continue to negotiate a license for televisions separately thereafter. Appx20117-20118 (Spiro Tr. 117:15-118:13). The litigation against LG was dismissed with prejudice as to LG's

monitors and without prejudice as to LG's televisions. Appx1304 (2nd Am. Complaint ¶¶ 18-19).<sup>5</sup>

After LG settled, the case proceeded to trial against the other defendants. TPV and Hon Hai settled immediately before and during trial, respectively. Appx20243 (Spiro Tr. 243:9-14); Appx20245-20246 (Spiro Tr. 245:22-246:5); Appx20985-20989 (Spiro Tr. 985:24-989:16); Appx15168-15184 (TPV); Appx15185-15200 (Hon Hai). The TPV agreement was for a **MONDIS-TPV AGM** based on Mondis' **MONDIS-TPV AGM** rate for the **MONDIS-TPV AGM** patents on an **MONDIS-TPV AGM** of **MONDIS-TPV AGM** at an **MONDIS-TPV AGM**. Appx20987 (Spiro Tr. 987:2-24). The Hon Hai television license agreement was also for the **MONDIS-HON HAI AGM** rate. Appx21000-21001 (Spiro Tr. 1000:20-1001:5); Appx21079-21080 (Bratic Tr. 1079:15-1080:1).

The third litigant, Innolux, took the case to verdict and lost. On June 21, 2011, the jury found that the asserted patents were infringed, were not invalid, and awarded a reasonable royalty of 0.75% for televisions for just the '180 patent and

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<sup>5</sup> Referring to *Mondis Tech., Ind. v. LG Electr. Inc. et. al*, Case No. 2:07-cv-565-TJW-CE (E.D. Tex.), D.E. 135, Sept. 17, 2009 (order of dismissal).

two other DDC/2B family siblings, which issued off the same specification.<sup>6</sup> Appx20989-20990 (Spiro Tr. 989:21-990:8). It is undisputed that there were no meaningful differences for infringement purposes between Innolux's and LG's accused televisions. Appx21043-21044 (Lamm Tr. 1043:4-1044:4). Innolux appealed, but in 2013, during the appeal's pendency, entered into a settlement agreement that encompassed the verdict's entire 0.75% television reasonable royalty, without discount. Appx20990 (Spiro Tr. 990:9-19).

#### **E. Mondis and LG Television License Negotiations**

In the months leading to the June 2011 Texas trial, Mondis tried to reopen television negotiations with LG, but LG was unwilling or unable to meet before the final outcome. Appx20124-20125 (Spiro Tr. 124:23-125:2); Appx20991-20992 (Spiro Tr. 991:2-992:6). Shortly after the June 2011 Innolux verdict, the parties re-engaged. Mondis and LG met in-person on three continents no fewer than seven more times. Appx20124-20125 (Spiro Tr. 124:23-125:19). During the course of the meetings, LG persistently delayed, failed to provide promised television pricing information, baselessly claimed refunds for royalties paid under the monitor license, and when asked point blank whether it had filed anonymous

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<sup>6</sup> Patent Nos. 6,247,090 ("090 patent") and 7,089,342 ("342 patent"). Appx20980-20981 (Spiro Tr. 989:21-990:8).

reexamination petitions, falsely represented that it had not. Appx20117-20118 (Spiro Tr. 117:18-118:13); Appx20125-20126 (Spiro Tr. 125:20-126:4); Appx20992-20996 (Spiro Tr. 992:7-996:15); Appx1461-1470 (May 12, 2014 RX Request); Appx1005-1008 (Spiro Decl); Appx1472. LG never claimed that it did not infringe the patents during the negotiations. Appx20126 (Spiro Tr. 126:5-17). LG brought no LG negotiator to trial to rebut these facts.

#### **F. The Present Litigation**

Exasperated by LG's intransigence, Mondis filed a complaint in the Eastern District of Texas in June 2014 alleging infringement of the '180 patent and four other patents in the same family. Appx20127-20128 (Spiro Tr. 127:7-128:9). In 2015, the case was transferred to the District of New Jersey, where LG obtained a stay pending reexamination. Appx599 (D.E. 56); Appx601 (D.E. 67); Appx605 (D.E. 120, 121). In June 2016, the PTO issued a reexamination certificate for certain claims of the '180 patent. Appx15029-15030. To expedite the litigation and in recognition of the preeminent importance of the '180 patent in the DDC/2B family, Mondis voluntarily cancelled all claims of the other four patents-in-suit in reexamination and requested that the district court lift the stay, which it did on July 21, 2016. Appx1060-1063; Appx1064.

**G. Damages**

HITACHI/MONDIS AGMS

Mondis presented a textbook reasonable royalty case. With [REDACTED] prior licenses entered into using consistent pre-litigation rates, including a prior license under the patent-in-suit between the parties to the litigation, there was substantial evidence from which to craft a royalty case. Mondis' damages expert, Walter Bratic, examined the royalty evidence and gave an opinion about the likely result of a hypothetical negotiation under the *Georgia-Pacific* framework.

Mr. Bratic found that Mondis and LG would have started with their prior Mondis-LG license agreement for monitors. Appx1173 (¶ 152). That agreement had an attached letter stating that the rate the parties used was [REDACTED] of the product price, subject to certain specific stipulated discounts. Appx1153-1154 (¶¶ 100-101). Mr. Bratic apportioned the [REDACTED] between the two licensed patent families (DDC/2B and DDC/CI) because only the DDC/2B family including the '180 patent was relevant to the television infringement in the hypothetical license. Appx1127 (¶ 10); Appx1131-1132 (¶ 49); Appx1199 (¶¶ 221, 223). He also observed that the normal rate for the DDC/2B family in television licenses with third parties was 0.25% of the ASP of the television. Appx1180-1181 (¶¶ 168, 169); Appx1196 (¶ 210); Appx1198-1199 (¶¶ 221, 223). Accordingly, Mr. Bratic adjusted the [REDACTED] rate in the Mondis-LG monitor agreement downwards to 0.25%. He then adjusted

the rate upwards to account for the lack of uncertainty in the hypothetical negotiation and other factors to 0.75%. Appx1199-1201 (¶¶ 223-228). Based on the ASP of LG's sales of infringing televisions, he concluded that the reasonable royalty was \$76.1 million. Appx1204 (¶ 234).

LG's expert, Mr. Hansen, accepted Mr. Bratic's starting point of 0.25%, which was the normal license rate for the '180 patent family in televisions. Appx1225-1226 (¶ 37); Appx1230 (¶ 48); Appx1270-1272 (¶ 146). He then made a series of (dubious) assumptions to drive down the hypothetical negotiation royalty further, including: that the parties would have agreed to use LG's monitor (rather than accused television) ASPs as the royalty base (Appx1225-1226 (¶ 37); Appx1270-1272 (¶ 146)); that there would be no need to remove the uncertainty discount (Appx1224-1225 (¶¶ 35-36); Appx1287-1293 (¶¶ 185-196)); and that the 0.25% rate should be divided by the number of litigation-asserted patents. Appx1227 (¶ 41); Appx1230 (¶ 47); Appx1232 (¶ 52); Appx1270-1272 (¶ 146). Mr. Hansen ignored the facts that the royalty base in every prior license was the actual product accused; that the royalty rate in every prior license was discounted for uncertainty; that the license program charged the same rate for a patent family if one patent in the family was infringed; and that the royalty payable would not rise or fall each time a new patent issued in a family, or expired or was invalidated.



Mr. Hansen presented no evidence that is how anyone actually negotiates patent licenses in the real world, much less in the Hitachi/Mondis licensing program, or sought to rely on any LG witness who negotiated the prior monitor license with Mondis, or the proposed new one for LG televisions. As a result of these reductions, Mr. Hansen opined that a reasonable royalty was \$1.9 million. Appx1212-1213 (¶ 9); Appx1275-1276 (¶ 155).

## **H. District Court's Denial of LG's *Daubert* Challenge**

Before the first trial, LG challenged Mr. Bratic's expert opinions under *Daubert* on the ground that, among other things, his use of the real-world 0.25% normal royalty rate for the '180 family, without further dividing that rate by the number of all litigation-asserted patents in the family, violated this Court's apportionment jurisprudence. Appx628 (D.E. 321, 322). After a lengthy hearing, where the district court actively questioned both experts, the court ruled that Mondis could proceed to trial on its damages theory. Appx20918 (Tr. 918:18-22); *see also* Appx214.

## **I. 2019 Bifurcated Trial**

### **1. Liability Phase**

On LG's motion, the district court bifurcated the original 2019 trial into separate liability and damages/willfulness phases before a single jury. During the

liability phase, the jury took less than an hour to reject LG's defenses and return a verdict for Mondis that all accused LG television models infringed and the patent was not invalid. Appx193-194.

## **2. Damages/Willfulness Phase**

During the damages and willfulness phase, Mondis director Michael Spiro, the company's licensing representative who actually negotiated many of the prior licenses, including the monitor license with LG and the unsuccessful television license with LG, testified about Hitachi's and Mondis' licensing program, the real-world normal threshold royalty rates reflected in the prior licenses, the two-thirds pre-litigation uncertainty discount, the 2009 LG monitor agreement, Mondis' successful litigation against LG's former co-defendants Innolux, Hon Hai and TPV, and the subsequent unsuccessful negotiations over LG's infringing televisions. Appx20097-20129 (Spiro Tr. 97:1-129:3); Appx20241-20246 (Spiro Tr. 241:8-246:10); Appx20965-21001 (Spiro Tr. 965:2-1001:5); Appx21010 (Spiro Tr. 1010:1-5).

Mondis also introduced expert testimony of Joseph Lamm, an engineer then with more than 42 years of experience in the display industry and a former board member with the Video Electronics Standards Association ("VESA") that developed industry display DDC standards. Appx20271-20272 (Lamm Tr.

271:14-272:6); Appx20280-20281 (Lamm Tr. 280:8-281:3). Mr. Lamm testified about the preeminent and inherent technical and commercial importance of the '180 patent among its family members, which was unrelated to its incorporation into industry standards. Appx21025-21028 (Lamm Tr. 1025:22-1028:4); Appx21033-21035 (Lamm Tr. 1033:2-1035:7). Mr. Lamm testified that of the other patents in the '180 family Mondis has asserted in litigation, only the '180 patent enabled automatic picture configuration in televisions. Appx21036-21039 (Lamm Tr. 1036:6-1039:3); Appx21040-21041 (Lamm Tr. 1040:23-1041:8). The other patents related to bidirectional communication of data such as a display's serial number or model number, which are not used for television picture configuration. Appx21037-21038 (Lamm Tr. 1037:6-1038:21). Mr. Lamm also testified that LG's televisions used the '180 technology an average of 3.6 times per television, due to the multiple HDMI ports used to connect multiple video sources, and that in contrast, LG monitors generally only had one such ports. Appx21035-21036 (Lamm Tr. 1035:18-1036:5).

In keeping with the district court's *Daubert* ruling, Mondis also introduced the testimony of Mr. Bratic, including (among other things) the real-world 0.25% normal rate for the '180 family. Appx21058-21097 (Bratic Tr. 1058:25-1097:22). Mondis also introduced the prior licences themselves reflecting the rates.

LICENSEE  
Appx15033-15062 (Mondis-[REDACTED]); Appx15133-15147 (Hitachi-[REDACTED]);  
LICENSEE LICENSEE  
Appx15152-15167 (Hitachi-[REDACTED]); Appx15168-15184 (Mondis-[REDACTED]);  
Appx15185-15189 (Mondis-[REDACTED] settlement agreement); and Appx15190-  
15200 (Mondis-[REDACTED] license agreement).

At no point in the trial did the district court give any indication that it had any concerns about Mondis' approach to proving damages; indeed, the district court summarily dismissed LG's Rule 50(a) JMOL motion on damages.

Appx21242 (Tr. 1242:10-17).

On April 12, 2019, the jury found that LG's infringement of the '180 patent had been willful and awarded Mondis \$45 million in compensatory damages.

Appx216-217.

#### **J. Post-Trial Motions**

Following the 2019 trial, LG filed motions for: (1) JMOL or new trial of non-infringement, (2) JMOL or new trial of invalidity, and (3) JMOL, new trial or remittitur attacking the damages and willfulness awards. Appx646 (D.E. 486-490).

Mondis filed motions seeking enhanced damages, attorneys' fees, and interest.

Appx646-647 (D.E. 491-496).

On September 24, 2019, the district court denied LG's JMOL and new trial motions on infringement, invalidity and willfulness, ending the liability phase of the case. Appx220-227; Appx250-252.

On damages, the district court vacated the \$45 million verdict. Appx252. Reversing its position from the *Daubert* ruling, the district court ruled that Mr. Bratic's and Mondis' damages theory was legally invalid under this Court's apportionment jurisprudence. Thus, while the record evidence was undisputed that real-world licensees paid the same price for use of the '180 patent as for any and all other patents in the same family, and while the jury heard LG test Mondis' contentions robustly during cross-examination and in closings, the district court rejected that evidence as insufficient as a matter of law. The district court now condemned the routine licensing practice of licensing any or all family patents for one price as "paradoxical":

[A] license which is designed so that the underlying patents have no incremental value cannot at the same time be evidence of "the incremental value that the patented invention adds to the end product." Ericsson, 773 F.3d at 1226.

Appx234.

The district court also concluded that no reasonable jury could accept that LG would pay the full rate for the '180 patent, which would leave it exposed to the

licensor's other patents not in suit, making the hypothetical negotiation license commercially useless. Appx236. The district court wrote:

No reasonable jury could accept this proposition, that a business would willingly agree to pay the threshold rate but receive nothing usable in return. And, indeed, why would any business pay anything for a license that did not allow that business to make and sell its product? If there are four patents that are essential to the DDC2B standard, of what value is a license to only one of the four?

Appx236.

Mondis protested that this violated the jury instructions and cardinal rule of the hypothetical negotiation that only patents-in-suit can be considered.

Appx1331-1332. Mondis pointed to the record evidence from the agreements and negotiator, Mr. Spiro, that Mondis never sought to charge more money for an additional patent and would never have tried to do so. Appx1329-1332. The district court was unmoved.

Rather than order an immediate new trial, the district court indicated it was inclined to simply grant judgment against Mondis. Appx249. After extensive briefing and argument, the district court concluded that it was required to hold a retrial. Appx255-263. However, in the same order, and without citing any apposite authority, the district court severely restricted the scope of the damages

retrial by barring Mondis from presenting any evidence that had not been presented at the prior trial, with the possible exception of supplemental expert testimony by Mr. Bratic. Appx263. The district court’s “no new evidence” ruling was not requested by LG and is unprecedented. The ruling, evidently derived from the district court’s underlying misconceptions of the retrial law, would haunt the remaining phases of the proceedings.

**K. LG’s Untimely Interlocutory Appeal**

On May 8, 2020, LG filed a notice of appeal under 28 U.S.C. § 1292(c), which permits interlocutory appeals from final judgments in patent cases that are “final except for an accounting.” Appx1339-1342. This Court ultimately dismissed the appeal as untimely. No. 20-1812 (D.E. 68, 69, 82, 83).

**L. District Court Retrial and *Daubert* Rulings**

The district court gave Mondis limited permission to serve a supplemental expert report from Mr. Bratic. The offer proved to be illusory. The district court insisted that the report could not rely on any evidence in the discovery record or listed in the pre-trial order if that piece of evidence had not been admitted at the first trial. Appx271-272 (“Mr. Bratic may express expert opinions about reasonable royalties to the extent that such opinions are based on the existing trial record *only*.”) (emphasis in original). Because the evidence presented at the first

trial was selected to support the original but now banned report, the task was impossible.

Mondis sought to present two pages of supplemental opinions from its technical expert. The district court refused to accept it. Appx264-265. Mondis sought to present a new report from Mr. Bratic based on other means of apportionment. LG argued that this was just threshold by another name, and the district court ultimately banned Mr. Bratic's report in its entirety.<sup>7</sup>

The prejudice was severe. Mondis sought to rely on Section 4.4 of the Hon Hai license, which specifically referred to claim 14 of the '180 patent, because the license required payment of the full royalty if that was the only valid claim remaining. Appx15194-15195. Thus, the Hon Hai license apportioned to the '180 patent and indeed a claim in suit. The agreement was admitted and testified about at the first trial. Appx20243 (Spiro Tr. 243:9-14); Appx20988-20989 (Spiro Tr. 988:10-989:16); Appx21075-21080 (Bratic Tr. 1079:15-1080:1); Appx21192 (Hansen Tr. 1192:13-19); Appx21203-21204 (Hansen Tr. 1203:11-1204:22). But because Mondis had not pointed to that specific provision—which was

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<sup>7</sup> LG filed a *Daubert* motion against the remaining portions of Mr. Bratic's proposed supplemental report. The district court granted the motion, finding that several of the supplemental theories were based on the threshold theory that the court had previously ruled was legally invalid after the first trial. Appx296-324.



unnecessary given the Court’s *Daubert* ruling—the district court barred Mondis from doing so at the second trial. Appx1366-1368; Appx447 (regarding Plaintiffs’ motion *in limine* No. 2). The same applied to the Innolux license, which was testified to, but not formally admitted. Appx20989-20990 (Spiro Tr. 989:17-990:19); Appx21067 (Bratic Tr. 1067:18-21); Appx21144 (Bratic Tr. 1144:20-21). In some cases, facts within Mr. Spiro’s personal knowledge came out about the Hon Hai and other licenses and the licensing program through the two damages experts or the license exhibits, but the district court precluded Mr. Spiro from testifying about these facts because he did not utter the exact words at the first trial. Appx1360-1369; Appx1389-1390; Appx446 (“No new testimony may be elicited from any witness.”).

No statute, rule or case law was ever provided to support these determinations. Mondis cited Federal Rule of Evidence 402, which is a mandatory rule governing the admission of evidence at trial and requires a district judge to admit relevant evidence unless the Constitution, a federal statute, the Federal Rules of Evidence or Supreme Court rule prohibit its introduction. None of those exclusions applied here. Appx1384-1385. That plea was rejected as well.

To ensure clear rules of the road at the retrial, and to avoid any hint of waiver, Mondis moved *in limine* for a definitive ruling under Federal Rule of

Evidence 103 on the admissibility at retrial of a host of evidence and arguments.

Appx1352-1370. The district court confirmed that its retrial rules barred this evidence and argument:

1) unless otherwise excluded, evidence and testimony presented at the previous trial may be presented at retrial, to the same extent and in the same form; 2) no new evidence or testimony—that is, no evidence or testimony that was not presented at the previous trial—may be presented at retrial. No witness may change the scope or content of testimony at retrial from the scope and content of testimony at the previous trial. No testimony at retrial may vary from that testimony presented at the previous trial. Only previously admitted evidence will be admitted at retrial. [...]

The scope and content of the retrial is largely a subset of the previous trial, omitting Bratic’s testimony and his reasonable royalty theories, as well as evidence not relevant to the issues of reasonable royalty damages. The only new elements to be permitted at retrial are: Mondis may rely on Hansen’s reasonable royalty theories, Mondis may argue to the jury for the application of the uncertainty discount principle to Hansen’s reasonable royalty theories, and LG may argue against that.

Appx442-444.

#### **M. February 2023 Damages Retrial**

The damages retrial took place on February 6-7, 2023. Appx677-678 (D.E.760-765). The district court strictly enforced its “no new evidence” rule, only permitting Mondis’ fact witness to testify to the same facts he testified to at the

first trial. Appx443. Documents listed as exhibits in the pre-trial order but not admitted at the first trial, like the Hon Hai agreement, were barred. Appx443. In a ruling that has no precedent, counsel were instructed to basically repeat their direct and even cross-examinations of the witnesses attending. Appx446 (“Any party examining Hansen—or any other witness—may ask leading questions insofar as the leading questions lead to a restatement of the witness’s previous testimony. **No new testimony may be elicited from any witness.**”) (emphasis in original).

Mondis called LG’s expert Mr. Hansen and repeated the cross-examination from the first trial (which he had a transcript of to prepare for). Mondis examined Mr. Hansen on the bases for his \$1.9 million reasonable royalty opinion, including his opinions that: (1) the parties would compute a reasonable royalty using the \$126 average computer monitor price from the 2009 monitor license rather than the average price of the accused product here (\$518), as Mr. Spiro testified without contradiction from any LG witness; and (2) there would be no upward adjustment in the hypothetical negotiation for the ’180 patent’s certainty of infringement and validity, also as Mr. Spiro testified without contradiction from any LG witness. Appx30152-30167 (Hansen Tr. 152:11-167:20); Appx30170-30177 (Hansen Tr. 170:24-171:12, 172:22-177:14); Appx30220-30223 (Hansen Tr. 220:19-223:21).

Prior to closing, Mondis asked for permission to take Mr. Hansen's \$1.9 million figure and show the jury the corrected math based on admissions made during cross-examination. The Court refused to allow that as well. Appx30213-30214 (Tr. 213:18-214:1); Appx30226 (Tr. 226:7-12); Appx17147-17148 (Mondis proffered demonstrative). In closing, Mondis counsel argued that Mr. Hansen's calculation was flawed and invited the jury to calculate an adjustment based on the evidence, but in compliance with the court's restrictions, did not present any affirmative, alternative damages calculation. Appx30285 (Tr. 285:8-19); Appx30288-30301 (Tr. 288:25-301:17).

Within the strict confines the district court set, the jury returned after about two hours of deliberations, awarding Mondis \$14.3 million. Appx506. That was \$12.4 million more than LG and Mr. Hansen had proposed.

#### **N. Damages Retrial Post-Trial Motions**

LG filed a post-trial motion for JMOL, new trial and/or remittitur, and Mondis filed a motion for enhanced damages and attorneys' fees, and a motion for prejudgment interest at the prime rate, compounded quarterly from the 2009 date of first infringement. Appx679 (D.E.772-777). The district court denied LG's motion. Appx531-545.

The court also denied Mondis’ motion for enhancement and fees. Appx509-527. In doing so, the district court reversed its previous ruling that LG had acted with knowledge of its infringement. After post-trial briefing for the first trial in 2019, the court stated that, “there is ample evidence ... that LG’s infringement of the ’180 patent through the manufacture and sale of televisions was, for at least some of the period of alleged infringement, *done with knowledge that LG was infringing* asserted claims of the ’180 patent.” Appx251 (emphasis added). Yet, after the second trial, the district court made the opposite finding: “Mondis has offered no evidence that LG believed that the ’180 patent was valid and that LG’s televisions infringed.” Appx522; Appx514-515. The court then awarded prejudgment interest, but only simple interest at the Treasury Bill rate, and only from the June 2014 date of the complaint. Appx547.

The parties filed notices of appeal that day. The district court entered judgment on June 16, 2023, and the parties filed amended notices of appeal the same day.

### **SUMMARY OF THE ARGUMENT**

I. The district court correctly resolved the pertinent *Daubert* issues prior to trial, holding that a patent holder may use the built-in apportionment of prior licenses to satisfy its burden of production on damages. There was a wealth of

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licensing evidence, including [REDACTED] licenses with consistent rates and structure. Both experts agreed that the normal rate for the small family of patents including the '180 patent-in-suit was 0.25%. The evidence was that the '180 family was always licensed together for the same price, where the licensee would pay the 0.25% royalty for the patent to which it thought it was most exposed and thereafter be free of further exposure to any and all other family patents on the same product, and that this type of patent licensing reflected commercial practice. The jury's award of \$45 million was soundly grounded in that record. The district court's decision to reverse its *Daubert* ruling following trial and order a new trial was based on errors of law. The district court's treatment of licensing comparability is in conflict with at least this Court's decisions in *Vectura*, *Bio-Rad* and *Elbit Systems* and should be reversed.

II. The district court compounded the damages error by ordering a new trial under its "no new evidence" rule, which prohibited the admission of any evidence at the second trial that was not submitted at the first trial. The rule took no account of the altered legal landscape and violated Federal Rule of Evidence 402, which governs the admissibility of evidence at trial, and fundamental fairness. That Mondis obtained a jury verdict at retrial does not address the prejudice it suffered during the 2019 post-trial process. The basis of the district court's

approach in denying attorneys' fees and enhanced damages, and the selection of a historically low interest rate, were tainted by the district court's underlying damages errors. And should this Court order a new trial for any reason, the Court should order that it not be conducted under the "no new evidence" rule.

III. The entitlement to enhanced damages and attorneys' fees under 35 U.S.C. §§ 284 and 285 present related questions. Both rest on the jury's finding of willfulness and an evaluation of LG's good faith conduct. After the first trial, the district court held that LG was, in fact, a knowing infringer for at least part of the damages period, but after the second trial, the district court reversed that ruling as well, finding LG had acted in good faith at all times. The result was to give no effect to the jury's willfulness finding. The district court's legal analysis of several of the *Read*<sup>8</sup> factors was erroneous, as was the district court's *Halo* analysis, which focused on litigation conduct, rather than LG's state of mind during the infringement period. The decisions should be reversed.

IV. There is a presumption that Mondis is entitled to prejudgment interest under 35 U.S.C. § 284. The district court broke with that presumption by refusing to award Mondis prejudgment interest for five years during which the parties were

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<sup>8</sup> *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 827 (Fed. Cir. 1992).

in active negotiations, even though there was no showing of prejudice to LG. And the rate the district court did award for the post-suit period, the T-Bill rate at simple interest, is low and unjustified by any measure. In combination, the decisions constitute an abuse of discretion and require reversal. Mondis should be awarded the predominant measure of pre-judgment interest in the Third Circuit, prime, compounded annually.

## **ARGUMENT**

### **I. THE DISTRICT COURT COMMITTED LEGAL ERROR IN GRANTING A NEW TRIAL ON DAMAGES FOLLOWING THE 2019 VERDICT.**

#### **A. Standard of Review**

This Court reviews the grant of a new trial under the law of the regional circuit. *Biogen MA Inc. v. EMD Serono, Inc.*, 976 F.3d 1326, 1331 (Fed. Cir. 2020). The Third Circuit reviews the grant of a new trial against the weight of the evidence for an abuse of discretion, unless the district court's decision is based on the application of a legal precept, in which case the standard of review is plenary. *Id.* (citing *Lightning Lube, Inc. v. Witco Corp.*, 4 F.3d 1153, 1167 (3d Cir. 1993)). Here, the district court's decision to vacate the 2019 jury's damages verdict was based on its erroneous legal interpretation of this Court's damages rulings. Accordingly, this Court's review of the new trial grant is plenary.



The remedy for an erroneous grant of a new trial motion is reinstatement of the underlying verdict. Where a motion for new trial should not have been granted, the Third Circuit “will reverse the order granting a new trial and reinstate the verdict reached at the first trial.” *Blancha v. Raymark Indus.*, 972 F.2d 507, 512 (3d Cir. 1992). This Court has applied the Third Circuit standard of review to vacate new trial orders and reinstate prior jury verdicts. *Biogen*, 976 F.3d at 1336-37 (reversing New Jersey district court conditional grant of new trial and reinstating jury’s verdict of anticipation); *LNP Engineering Plastics, Inc. v. Miller Waste Mills, Inc.*, 275 F.3d 1347, 1361 (Fed. Cir. 2001) (reversing court’s conditional grant of new trial on obviousness and reinstating verdict); *see also Mentor H/S, Inc. v. Med. Device All., Inc.*, 244 F.3d 1365, 1369–70 (Fed. Cir. 2001) (reversing district court’s grant of new trial and reinstating verdict of infringement); *Richardson v. Suzuki Motor Co., Ltd.*, 868 F.2d 1226, 1245-48 (Fed. Cir. 1989) (reversing and reinstating damages award).

**B. The District Court Committed Legal Error in Misapplying This Court’s Jurisprudence on License Comparability and Apportionment.**

This Court has repeatedly emphasized the importance in patent damages of real-world license and negotiation evidence. *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1228-29 (Fed. Cir. 2014); *Commonwealth Scientific and Indus.*

*Research Org. v. Cisco Sys., Inc.*, 809 F.3d 1295, 1302-03 (Fed. Cir. 2015)

(“*CSIRO*”). The jury was entitled to rely on that evidence in evaluating what the parties would have agreed to in the hypothetical negotiation. Nonetheless, the district court held that the real-world licenses on which Mondis’ damages case was based were threshold licenses which “paradoxically” could not meet this Court’s apportionment precedent, essentially on two related grounds—that the licenses were designed to reflect the value of the DDC technology rather than the value of the ’180 patent alone; and that no one would ever pay for the ’180 patent alone and then face exposure to the family members. These conclusions mistreat evidence and misapply relevant law, and therefore are clearly erroneous.

### **1. The Jury Verdict Was Supported by Substantial Evidence.**

In deciding damages, the jury was asked to consider a number of fact questions, effectively including to what extent the parties to the hypothetical negotiation would have reduced the ’180 family rate to reflect the fact that the hypothetical negotiation was over the ’180 patent alone. LG did not ask for any special interrogatories on the question, so there is no way to determine whether or to what extent the jury discounted the family rate in reducing the verdict from the full \$76.1 million Mondis requested to \$45 million, but it may well have done so given that it awarded 40% less than Mondis requested.

There was substantial evidence at trial supporting both technical and economic comparability between the real-world licenses and the hypothetical *Georgia-Pacific* license.

As for technical comparability, the evidence was that the '180 patent and other related, licensed patents derived from a common application and constituted a single overarching invention involving the same core technology, *i.e.* DDC/2B bidirectional plug-and-play communication. Appx20967-20968 (Spiro Tr. 967:10-968:10); Appx20343 (Lamm Tr. 343:6-14); Appx21036 (Lamm 1036:6-22). Mondis' technical expert Joseph Lamm testified that within that DDC/2B family, the '180 patent was the most important for the accused products, televisions, because it was the only one that actually enabled automatic television picture configuration. Appx21036-21039 (Lamm Tr. 1036:6-1039:3); Appx21040-21041 (Lamm Tr. 1040:23-1041:8). He also testified that the patented technology was utilized much more frequently in LG's televisions than in its computer monitors. Appx21035-21036 (Lamm Tr. 1035:18-1036:5).

As for economic comparability, the evidence was that the licensing program was based on what the patentee called a "threshold" basis, whereby the licensee paid one price for access to each patent family for the relevant product. For the '180 family, the licensee would pay the 0.25% royalty for the patent to which it

was most exposed and thereafter be free of further exposure to any and all other family patents on its licensed television. Mr. Spiro explained this at trial as follows, without LG contradiction:

[T]hat's when a license is taken out for the technology itself, irrespective of a number of patents. You do not negotiate on a patent-by-patent basis. It's the entry level to the technology, so, in practical terms, you negotiate the license for the one patent, the best patent, and all the rest come with it. You do not pay more for any patents for second, third, fourth or any amount of patents.

Appx20966 (Spiro Tr. 966:10-18).

... It's very practical actually. When you come to negotiate a license agreement, it's a long process. It takes—sometimes it takes years, and you enter into the agreement with somebody and they expect to be paying once. You get paid once and they want peace. They don't want you coming back later if another patent is used or another patent is acquired or anything like that, to come back and to tell them again, sorry, you owe some more. So you negotiate a price for the technology and it's an all-in [price], irrespective of amount of patents.

Appx20966-20967 (Spiro Tr. 966:25-967:9).

Mr. Bratic similarly testified that this form of licensing was common in his own experience of negotiating patent licenses and in reviewing thousands more of them. Appx21074-21077 (Bratic Tr. 1074:18-1075:14, 1075:15-1077:6). He also pointed to several provisions in the 2009 LG monitor license that demonstrated application of Mondis' licensing policy: (1) the **MONDIS-LG AGM** of **MONDIS-LG AGM**

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 MONDIS-LG AGM with no [REDACTED] in the MONDIS-LG AGM  
 (Appx21076 (Bratic Tr. 1076:1-10)); (2) the parties were [REDACTED] that the [REDACTED]  
 [REDACTED] would [REDACTED] than the [REDACTED] patents but the license [REDACTED]  
 [REDACTED] the [REDACTED] upon that [REDACTED] (Appx21076 (Bratic Tr.  
 1076:11-17)); (3) the agreement granted LG the [REDACTED] to [REDACTED] the license  
 [REDACTED] it was not [REDACTED] to [REDACTED] in [REDACTED]  
 Mondis [REDACTED], and LG [REDACTED] that [REDACTED] (Appx21131-21132 (Bratic Tr.  
 1131:19-1132:11); Appx15046 (MON-0010 § 5.9)); and (4) the price for [REDACTED] a  
 [REDACTED] as the [REDACTED], would [REDACTED] the [REDACTED]  
 [REDACTED]. Appx21076-21077 (Bratic Tr. 1076:18-1077:3); Appx15046 (MON-  
 0010, § 5.8).

A reasonable jury evaluating this evidence could have concluded that the rate for the '180 patent that the parties would have agreed to during a hypothetical negotiation was at or near the full family rate. Certainly, the evidence supported the reduction to 60% of Mondis' requested damage figure, whatever may have been the anatomy of the reduction.

**2. The District Court Erred in Concluding That This Court Requires Apportionment of the Rate Paid for Continuation Patents.**

The district court refused to accept the jury's verdict, concluding that this Court's apportionment jurisprudence barred that result. But while patentees must account for the differences between comparable licenses and the hypothetical negotiation, this Court has never held that the royalty for a single patent cannot, *as a matter of law*, be the same for one patent as for a small patent family issuing off the same specification.

To the contrary, in *Vectura*, this Court upheld a damages award for a single patent-in-suit based on a prior license between the same parties that encompassed more than 400 patents, including the patent-in-suit. 981 F.3d at 1039-41. The plaintiff's damages expert had opined that the reasonable royalty would encompass the license's full 3% rate because the license and hypothetical negotiation covered "roughly very similar technologies." *Id.* at 1041. The Court noted that "the fact that other patents were included in the 2010 license does not fatally undermine [the expert's] theory of comparability," and that the expert otherwise addressed the defendant's alleged differences between the license and the hypothetical negotiation. *Id.* The Court said that in that case, the license was sufficiently

comparable to have “built-in apportionment” that obviated the need for further apportionment down from the full license rate. *Id.* at 1040.

Similarly, in *Bio-Rad*, this Court held that a \$24 million damages award for three patents-in-suit was supported by sufficient evidence that included use of the full 15% license rates in comparable licenses for over 500 patents that were much broader than the three asserted patents. 967 F.3d 1353. The Court rejected the defendant’s objection that the 15% rate needed to be apportioned because the comparable licenses encompassed hundreds of patents and covered technology unrelated to the patents-in-suit. *Id.* at 1376-77. The Court concluded that these issues were matters of fact for the jury and not fatally defective flaws in the apportionment analysis.

*Elbit Sys.* is also in accord. There, this Court upheld a damages award for a single patent-in-suit that was supported by an expert’s use of the full license rate from a license between the defendant and third party for multiple patents because the patents were technically comparable to plaintiff’s patent-in-suit. 927 F.3d at 1300-01.

In all of these cases, the Court approved a damages analysis in which an expert used the full license rate even though the license included more patents and families than the patents-in-suit alone,<sup>9</sup> and left it for the jury to decide the facts.

**3. This Case Fits Squarely Within the *Vectura/Bio-Rad/Elbit* Line of Cases and Commercial Practice.**

The district court took a very different approach, misreading *CSIRO* in particular as requiring unity between the asserted patents and those licensed in a comparable license before it could reflect “built-in apportionment.” That is wrong: “[u]se of actual past licenses and negotiations to inform the hypothetical negotiation does not ‘require[] identity of circumstances.’” *Elbit*, 927 F.3d at 1299 (quoting *Virnetx, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1330 (Fed. Cir. 2014)). In *Vectura/Bio-Rad/Elbit*, the licenses were sufficiently comparable to the hypothetical negotiation of the patents-in-suit to have “built-in apportionment,” obviating the need for a further downward quantitative royalty adjustment, despite that (1) the *Vectura* license, with the same defendant, covered more than 400

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<sup>9</sup> Of course, a patentee cannot simply waive its hands and assert that a multi-patent license is comparable without cogent reason. Thus, in the split decision in *Omega Patents, LLC v. CalAmp Corp.*, 13 F.4th 1361 (Fed. Cir. 2021), the majority ruled that comparability was lacking when the patentee offered 18 licenses that included numerous patents and families but only two of the licenses included the patent-in-suit, and the agreements covered vastly different technologies. The majority did not purport to overrule *Vectura*, *BioRad* and *Elbit Systems*. *Id.*



patents (including the patent-in-suit), (2) the *Bio-Rad* license included 500 patents in disparate technology areas, and (3) the third-party license in *Elbit* covered five of the defendant's own patents for less advanced technology than the patent-in-suit.

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Here, Mr. Bratic first apportioned out 75% of the [REDACTED] rate in the Mondis-LG agreement to reflect the value of the '180 family alone. That apportionment was "built-in" the prior DDC/2B licenses. Mr. Bratic did not apportion further because all the other patents issued off the same specification in the same narrow field, the '180 patent was the most important in the family for televisions, and the threshold nature of the licenses did not require *or permit* further apportionment to the '180 patent alone. There was more than ample support in the record for his approach. The un rebutted testimony was that in the prior licenses, and in the licensing world more generally, licensors routinely charged the same rate for a patent as for its continuations. Licensors cannot double dip and charge a higher price for continuations that simply claim another aspect of the same invention for a product already licensed. That reality fits squarely within the *Vectura/Bio-Rad/Elbit* line of cases and common commercial practice.

The district court found this "paradoxical" but there is no paradox. There is no reason in logic or economics why the price of an item in a class must be less than the

price of a class. That is particularly true when the object on offer is peace from litigation in the form a license. How the parties to a licensing negotiation might resolve the question of price in any one case is a legitimate point of argument, but it is a question of fact for the jury, not law.

#### **4. Policy Considerations Weigh Strongly Against Adopting the District Court's Approach to Apportionment.**

Adopting the district court's approach to apportionment would have a wide-ranging and negative impact on patent damages law and subvert the mandate of 35 U.S.C. § 284 to provide every successful claimant with "in no event less than a reasonable royalty."

The apportionment point that exercised the district court was that the patentee had not further reduced the 0.25% market rate for the family to some lower number as a matter of law. If this Court were to approve the district court's approach, it would call into question any damages case where the patentee relies on a license to a patent and its continuations, which is common. Perverse results would follow. Indeed, the value of a patent-in-suit would vary negatively as additional patents issue from the Patent Office: one day, the '123 patent would be worth \$100, but when a continuation issues later, the '123 patent would be worth  $100/2 = \$50$ . And so on with further continuations. And if, as the district court

indicated, further apportionment to the individual asserted patent claims is required, the issue would arise in almost every case, as it is the rare trial that involves every claim in an asserted patent. Patent damages law should promote efficiency, rationality and reasonable predictability rather than enlarge the scope for confusion, unnecessary litigation and mischief, as the district court's approach would do.

#### **5. The District Court's Treatment of the Patentee's Other Patents Constitutes Legal Error.**

The district court also rejected Mondis' damages case on the ground that no licensee would agree to pay the threshold rate "but receive nothing usable in return." Appx236. The district court reasoned that if Mondis granted a license to the '180 patent alone, the licensee's products would be exposed to suit on other family patents required to practice the industry standard, so the '180 license would be useless. That factual premise—for which the evidence was to the contrary—rendered Mondis' comparable license-based case inadmissible. The analysis constitutes legal error on multiple fronts.

*First*, the hypothetical negotiation is, as a matter of law, limited to asserted patents. *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 76 (Fed. Cir. 2012) ("the purpose of the hypothetical negotiation framework ... seeks to discern

the value of the *patented* technology to the parties in the marketplace when infringement began”) (emphasis added). That a patentee may own other standards-essential,<sup>10</sup> or indeed non-standards-essential patents, copyrights, trademarks, contract claims or any other cause of action it could assert against the defendant’s accused products, is irrelevant. The very purpose of the hypothetical negotiation is to create an economic construct that allows the factfinder to isolate the value of the patent-in-suit. Importing a licensor’s other patents not asserted in the litigation into the negotiation violates the premise of the exercise.

*Second*, there was not a shred of evidence to support the district court’s assertion that Mondis would have brought later litigation, rather than provided the additional patents for no further royalty. The uncontested evidence was directly to the contrary. As noted above, Mr. Spiro testified that when licensees license one

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<sup>10</sup> The district court misconstrued standards essentiality in this case more generally. It found that Mondis paid “[n]o attention” to the difference between value added by the patent and value added by standardization. Appx238. In fact, there was un rebutted testimony on this very subject, Mr. Lamm explained that it is the standards that derive value from the invention, rather than vice versa. More particularly, after explaining the ’180 invention’s solution to the signal compatibility problem, Mr. Lamm testified that the standards body implemented the invention to achieve the “PNP” functionality and make displays easier to use. Appx20292 (Lamm Tr. 2019 at 292:6-14); Appx21034 (Lamm Tr. 1034:6-19). Mr. Lamm further explained the value and benefits of the invention apart from its incorporation into standards. Appx21025-21028 (Lamm Tr. 1025:22-1028:4); Appx21033-21035 (Lamm Tr. 1033:2-1035:17).

DDC patent, they receive the rest of the family members for free, and the practice is routine. Appx20966-20967 (Spiro Tr. 966:10-18, 966:25-967:9). The patents here were so closely linked that the '180 patent was terminally disclaimed over other family members. Appx1313-1317. Further patents therefore could not be split off and asserted by a third party; and in the hands of Hitachi/Mondis, after paying for one entry-level patent, the licensee would have no exposure on any other patents in the un-split family.

*Third*, even if (arguendo) the *Georgia-Pacific* hypothetical negotiation must now take consideration of matters outside the patent-in-suit, the issue of how to treat relevant evidence would be for the jury, not the court. Here, the district court not only violated the rules of the hypothetical negotiation, but then made factual findings about what would have happened at the augmented negotiation, *i.e.*, that Mondis would have retained the ability to sue the infringer again. That ran counter to the evidence. In any event, Mondis is entitled to all inferences in its favor as the verdict winner, and the negative factual assumptions the district court made regarding Mondis' behavior were also clearly erroneous.

## **II. THIS COURT SHOULD REVERSE THE DISTRICT COURT’S “NO NEW EVIDENCE” RULE, REMAND FOR RECONSIDERATION OF POST-TRIAL RELIEF, AND BAR USE OF THE RULE IN ANY FUTURE PROCEEDINGS.**

The district court’s rulings on enhancement, fees, and interest are subject to review under the abuse of discretion standard. Here, the reversible error is two-fold. The district court committed clear legal errors in applying the relevant legal principles. *Sisvel Int’l S.A. v. Sierra Wireless, Inc.*, No. 2022-1387, 2022-1492, 2023 WL 5659063, at \*4 (Fed. Cir. Sept. 1, 2023) (“Legal error constitutes an abuse of discretion.”). In addition, the district court brought a jaundiced eye to the analysis. Having adopted a misconception about the proper calculation of compensatory damages, the district court’s view of Mondis’ damages case carried over into its post-retrial damages analysis.

Procedurally, the root of the problems is the district court’s unsolicited “no new evidence” ruling. To Mondis’ knowledge, there is no precedent for the ruling. In fact, the ruling violates the clear mandate of Federal Rule of Evidence 402, which governs the admissibility of evidence at trial. The rule states:

### **Rule 402. General Admissibility of Relevant Evidence**

Relevant evidence is admissible unless any of the following provides otherwise:

- the United States Constitution;
- a federal statute;

- these rules; or
- other rules prescribed by the Supreme Court.

Irrelevant evidence is not admissible.

Fed. R. Evid. 402.

None of these sources of authority grant a district court judge the power to preclude the admission of relevant evidence at a retrial. The blanket “no new evidence” rule violated Rule 402 and by extension Mondis’ right to a fair jury trial under the Seventh and Fourteenth Amendments.

The impact of the ruling on the post-trial process evolved in phases. At first, the district court simply said “no new evidence.” Eventually, it became clear that what the Court wanted the parties to do was to replay the first trial, with the same testimony and documents even though the theory on which the first case had been tried was no longer valid. Whether the evidence was listed in the pre-trial order, disclosed in discovery or otherwise available to the parties was irrelevant. Mondis was permitted a revised expert damages report but not a two-page technical supplement to buttress it. As trial approached, the district court ruled that Mondis had to repeat its direct and cross-examinations from the first trial, effectively providing opposing witnesses a transcript of the upcoming cross.

This all put Mondis in an impossible position. To comply with the Court's order while preserving its right to appeal, Mondis filed motions for reconsideration, a motion *in limine* to obtain a definitive ruling on the non-admission of evidence under F.R.E. 103, and served multiple versions of the expert reports. The district court never answered Mondis' request for supporting legal authority, and instead, criticized Mondis for asking, culminating in the post-trial decision, taking Mondis to task for wasting the district court's time.

The court's language was colorful—but unfair. Commenting on the reconsideration motions designed to protect the record, the district court quoted its earlier view that “[t]he Court is tired of this nonsense.” Appx526 (quoting Appx292). Criticizing Mondis for not intuiting that the court had a retrial unique in law in mind, the court said “Mondis had persistent difficulty complying with the simple restriction that the Court imposed in the Opinion and Order of April 22, 2020, when it granted LG's motion for a new trial: no new evidence.” Appx526. Then, on exceptional case, the district court concluded that “[w]hat comes closest to standing out to the Court as ‘exceptional’ in this case was the chapter in which Mondis struggled to comply with the [“no new evidence” ruling].” Appx526.

To Mondis' knowledge, no court has ever tried a case under the “no new evidence rule.” It was deeply unfair for the district court to criticize Mondis for



having difficulty in complying with the rule or preserving appellate rights by testing what evidence would be admissible under the novel ruling. While the district court did not explicitly reference the “no new evidence” ruling in the enhancement or interest analysis and stated that it would have found the case unexceptional “without consideration of the chapter of the litigation involving the revised expert reports” (Appx526), the opinion spends a considerable amount of time weighing LG’s years of unabated infringement and scorched-earth litigation against the post-trial conduct of Mondis on the disputed “chapter.” Manifestly, the issue weighed heavily on the district court’s mind.

Accordingly, Mondis requests that this Court reverse the “no new evidence” ruling and require the district court to reconsider its rulings on enhanced damages, fees and interest. Moreover, if in light of LG’s cross-appeal or otherwise, this Court orders a third damages trial, then Mondis requests this Court to order that Mondis may submit its apportionment theory to the jury and that the trial will not be conducted under the “no new evidence” rule.

### **III. THE DISTRICT COURT’S FAILURE TO DECLARE THE CASE EXCEPTIONAL CONSTITUTES AN ABUSE OF DISCRETION.**

Under 35 U.S.C. § 285, “[t]he court in exceptional cases may award reasonable attorney fees to the prevailing party.” “Exceptional” simply means a

case “that stands out from others with respect to the substantive strength of a party’s litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated.” *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 572 U.S. 545, 554 (2014). It is well-established that a willfulness finding is sufficient to support a finding of exceptionality. *SiOnyx LLC v. Hamamatsu K.K.*, 981 F.3d 1339, 1355 (Fed. Cir. 2020) (citing *Therasense, Inc. v. Becton, Dickinson & Co.*, 745 F.3d 513, 516 (Fed. Cir. 2014)).

An exceptional case determination is reviewed for an abuse discretion, and a challenger must demonstrate that the district court made “a clear error of judgment in weighing relevant factors or in basing its decision on an error of law or on clearly erroneous factual findings.” *SiOnyx*, 981 F.3d at 1355 (quoting *Bayer CropScience AG v. Dow AgroSciences LLC*, 851 F.3d 1302, 1306 (Fed. Cir. 2017), and *Mentor Graphics Corp. v. Quickturn Design Sys., Inc.*, 150 F.3d 1374, 1377 (Fed. Cir. 1998)). As discussed above, the district court made a clear error of judgment in weighing the relevant factors when it criticized Mondis over the “no new evidence” matters. The district court also made three additional errors.

*First*, the district court declined to consider the jury’s willfulness finding on the ground that “Mondis does not argue that the willfulness finding reflects the

substantive strength of its litigating positions or unreasonableness in the manner in which the case was litigated, and thus has failed to connect the willfulness verdict in this case to the *Octane* standard.” Appx524. But there is no requirement in law that Mondis tie the willfulness finding to how the case was litigated. Willfulness is an independent basis from litigation misconduct for finding a case exceptional, and the district court was wrong to tie the two together.

*Second*, the district court referred to its previous discussion of the *Read* factors in finding that “this had been a close case.” Appx524. In doing so, the district court focused on patents and claims that dropped out of the case long before the litigation got underway in earnest. Appx516-517. The district court should have focused on the claims litigated through trial, which is what forced Mondis to incur millions in unnecessary fees. The district court relied heavily on LG’s reexamination actions at the PTO: “at one point in time, all claims at issue were rejected by the PTO during reexamination.” Appx517. The district court simply ignored the facts that after Mondis prevailed at the PTO on the ’180 Patent, it abandoned the other contested patents to return to New Jersey for trial without further delay. All of the litigation that followed was about the ’180 patent.

*Third*, given the size and financial condition of LG and the large amount of fees expended by Mondis to obtain a judgment after nine years of litigation,

Mondis’ motion urged the court to consider deterrence and fair compensation as part of the court’s analysis. Appx1442; Appx1453-1455. While acknowledging that the Supreme Court in *Octane* described a case that considered compensation and deterrence under the “similar” fees provision of the Copyright Act as an “example” of how to analyze the “totality of circumstances,” the court nevertheless found that compensation and deterrence were *not* factors in a § 285 analysis. Appx524 (citing *Octane*, 572 U.S. at 554, n.6). This was also error as it is a facially implausible reading of *Octane*. See, e.g., *Rothschild Connected Devices Innovations, LLC v. Guardian Prot. Servs., Inc.*, 858 F.3d 1383, 1387 (Fed. Cir. 2017) (identifying “compensation and deterrence” from *Octane* as factors in a § 285 analysis).

#### **IV. THE COURT COMMITTED CLEAR ERRORS OF LAW IN DENYING ENHANCED DAMAGES.**

Pursuant to 35 U.S.C. § 284, “the court may increase the damages up to three times the amount found or assessed.” Enhanced damages are designed to be a punitive sanction for egregious infringement behavior. *Halo Elec., Inc. v. Pulse Elec. Inc.*, 579 U.S. 93, 103-04 (2016). A willfulness finding is a sufficient basis to enhance a compensatory damages award. *Jurgens v. CBK, Ltd.*, 80 F.3d 1566, 1570 (Fed. Cir. 1996). While not mandatory, courts may use the *Read* factors in

guiding their enhancement analysis. *Sunoco Partners Marketing & Terminals L.P. v. U.S. Venture, Inc.*, 32 F.4th 1161, 1177-78 (Fed. Cir. 2022). Not all the factors need to support enhancement for a court to increase the award. *See, e.g., SRI Int'l, Inc. v. Cisco Sys., Inc.*, 14 F.4th 1323, 1330 (Fed. Cir. 2021), cert. denied, 142 S. Ct. 2732, 212 L. Ed. 2d 792 (2022) (reinstating double enhanced damages based on four *Read* factors); *Metabolite Labs, Inc. v. Laboratory Corp. of America Hldg's*, 370 F.3d 1354 (Fed. Cir. 2004) (affirming double enhancement damages based on four *Read* factors); *i4I Ltd. Partnership v. Microsoft Corp.*, 598 F.3d 831, 858-59 (Fed. Cir. 2010) (affirming enhancement based on five *Read* factors).

**A. The District Court's *Read* Analysis is Flawed.**

The district court applied the *Read* framework, concluding that factors 6 (duration of the misconduct) and 7 (remedial action) favored Mondis. Appx517-518. As to the remaining factors, the court clearly erred in its analysis of factor 2 (whether LG formed a good faith belief of non-infringement or invalidity), factor 4 (LG's size and financial condition) and factor 5 (closeness of case). Appx513-519.

With respect to the factor 2 analysis, good faith, the district court did an about-face, just as it had on *Daubert*. Following the first trial, the district court ruled that there was “ample evidence” that LG's infringement was “done with knowledge that LG was infringing asserted claims of the '180 patent.” Appx251.

Yet, following the second trial, the district court denied post-trial relief to Mondis on the ground that it had “offered no evidence that LG believed that the ’180 patent was valid and that LG’s televisions infringed.” Appx522; Appx514-515. This both contradicted the finding after the first trial and improperly shifted the burden to Mondis.

The district court misapplied the standard in other ways, requiring “egregious misconduct beyond typical infringement,” but then excused what was truly extraordinary here—LG’s payment of millions of dollars for one product line, monitors, but not for using the identical technology in another product line, televisions. Appx20367-20368 (Lamm Tr. 367:23-368:15). LG persisted in infringing even after its co-defendant suffered a jury trial loss, validating Mondis’ infringement and validity theories.<sup>11</sup> In the face of all this, LG did not present a single witness to explain itself, much less show it had a good faith belief it was not infringing. Indeed, at no time during eleven separate negotiating meetings did LG ever allege that its televisions did not infringe. Appx20126 (Spiro Tr. 126:5-9); Appx20217 (217:4-8); Appx20997 (Spiro Tr. 997:22-25). Given the complete

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<sup>11</sup> It is undisputed that Innolux’s and LG’s accused televisions infringed claim 14 of the ’180 patent for the same reasons. Appx21043-21044 (Lamm Tr. 1043:4-1044:4).

absence of evidence to support contemporaneous good faith, it was error for the district court to credit LG with any. Factor 2 should have been scored to Mondis.

On factor 4, the size of the infringer, the district court got the law exactly backwards. It is hornbook law that size favors enhancement, not the other way around. *See, e.g., SRI Int'l*, 14 F.4th at 1330 (reinstating enhancement where Cisco was the “world’s largest networking company”); *Metabolite Labs*, 370 F.3d at 1371 (affirming enhancement when defendant was “a large company with extensive financial means”); *i4I Ltd.*, 598 F.3d at 858 (affirming enhancement where Microsoft was a world leader in software with revenues of \$60.42 billion). LG is a very large company, and the district court committed clear error in refusing to score factor 4 for Mondis.

Similarly, on Factor 5, closeness of the case, the district court misapplied the relevant test. The decision relied heavily on a discussion of the reexaminations of other patents and unasserted claims of the ’180 patent. Claims 14 and 15 of the ’180 patent were tried in the Texas case that LG was well aware of, and it is those claims on which the case proceeded to trial in New Jersey. That other patents and claims dropped out during the proceedings below does not vitiate the plainly willful conduct of LG in connection with the claims that were tried. It is the enhancement of the damage award *on those claims* that Mondis seeks, and it was

error to infuse the merits of infringement of other patents and claims into that analysis.

**B. The Court’s “Generalized *Halo* Approach” Violates the Core Holding of *Halo*.**

In addition to the *Read* factors, the Court also considered enhancement “under the more generalized Halo approach.” Appx519. Despite referencing *Halo*, which focuses the analysis on the infringer’s state of mind at the time of infringement, the district court credited LG with having a good faith belief based on circumstances unknown to LG or occurring after the conclusion of the infringement period.

For instance, the district court concluded that LG’s conduct was “consistent with a reasonable belief of no infringement of any valid patent,” because the PTO had rejected claims 14 and 15 during reexaminations. Appx521-522. But the reexaminations initiated by LG were requested beginning in May 2014, after the ’180 patent had expired. Appx15025-15026; Appx15029-15032. They are therefore irrelevant to enhancement. *Halo*, 579 U.S. at 105 (“culpability is generally measured against the knowledge of the actor at the time of the challenged conduct.”). As for the 2009 rejection<sup>12</sup> from an earlier Innolux-initiated

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<sup>12</sup> Appx521, n.9.



reexamination, there is no evidence that any decision maker at LG was ever aware of that rejection, let alone relied upon it. So, it too is irrelevant. *Omega Patents, LLC v. CalAmp Corp.*, 920 F.3d 1337, 1353 (Fed. Cir. 2019) (state of mind evidence only relevant when known by decision makers prior to infringement). What LG did know was that the '180 patent had survived an Innolux validity attack at trial in a case in which it was originally a consolidated co-defendant. Appx20991-20992 (Spiro Tr. 991:13-992:2); Appx20996 (Spiro Tr. 996:4-21).

The district court also relied on LG's trial defenses, including its written description defense and non-infringement defenses based on the "communication controller" and "identification number" limitations. Appx517. But these defenses were developed for litigation and cannot insulate LG for its five years of pre-suit infringement. *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1339-41 (Fed. Cir. 2016) (applying *Halo* to reject defenses developed during litigation from enhancement analysis). In view of the foregoing, the court's analysis contravened *Halo* rather than applied it.

As part of its generalized analysis the court also asserted that the Mondis-LG computer monitor license "strongly" demonstrates LG's good faith. Appx521-522. As discussed above, that demonstrates precisely *the opposite*—that LG *knew* it also needed a license for its televisions, because they were "structurally identical"

to the licensed monitors, but LG refused to take one. *Cf. Spindelfabrik Suessen-Schurr Stahlecker & Grill GmbH v. Schubert & Salazar Maschinefabrik Aktiengesellschaft*, 829 F.2d 1075, 1084 (Fed. Cir. 1987) (unsuccessful attempt to obtain a license shows explicit awareness of infringement risk); *Asia Vital Components Co., Ltd. v. Asetek Danmark A/S*, 377 F.Supp.3d 990, 1022 (N.D. Cal. 2019) (similar). Here again, the district court committed a clear error in logic.

#### **V. THE DISTRICT COURT’S AWARD OF INTEREST WAS AN ABUSE OF DISCRETION.**

As the Supreme Court has held, “prejudgment interest should ordinarily be awarded” and “is necessary to ensure that the patent owner is placed in as good a position as he would have been in had the infringer entered into a reasonable royalty agreement.” *Gen’l Motors Corp. v. Devex*, 461 U.S. 648, 655 (1983). This Court reviews a district court’s denial of prejudgment interest for an abuse of discretion. *Kaufman v. Microsoft Corp.*, 34 F.4th 1360, 1373 (Fed. Cir. 2022).

Here the district court took two unusual steps: (1) it denied all pre-suit interest because it determined that Mondis “delayed filing this suit for five years.” (Appx528); and (2) it refused to apply the prime rate compounded, awarding Mondis the Treasury Bill rate, which has been close to zero for much of the relevant period. Appx530. Both of these decisions were infected with error.

**A. Mondis Should Not Be Punished For Negotiating With LG Before Bringing Suit.**

In a rare ruling, the district court refused even to grant Mondis interest for the entire infringement period, characterizing Mondis' preference for negotiation over litigation as a "calculated, strategic decision." Appx529. But the record reflects that the parties met almost a dozen times to discuss a resolution and that both parties were awaiting the outcome of the trial in the companion case in Texas. Appx20125-20128 (Spiro Tr. 125:3-128:9). There was no prejudice to LG from the delay in filing suit, and of course, LG always had the option to file a declaratory judgment action.

Indeed, the evidence showed that LG favored delay. For instance, LG failed to provide promised television pricing information or responses to Mondis' proposals, replaced its negotiators midstream, baselessly claimed to be licensed (twice), demanded refunds for royalties paid under the monitor license, and falsely told Mondis it had not filed anonymous reexaminations, ostensibly to forestall the litigation. Appx20117-20118 (Spiro Tr. 117:18-118:13); Appx20125-20126 (Spiro Tr. 125:20-126:4); Appx20992-20996 (Spiro Tr. 992:7-996:15); Appx1461-1470; Appx1005-1008; Appx1472.

This case is nothing like the *Crystal Semiconductor* case cited by the district

court. *Crystal Semiconductor Corp. v. Tritech Microelectronics Int'l, Inc.*, 246 F.3d 1336, 1362 (Fed. Cir. 2001). In that case, the court denied prejudgment interest because the plaintiff had intentionally chosen not to notify the defendant about its patents for two years before filing suit, as a self-serving attempt to drive up damages to defendant's prejudice. 246 F.3d at 1362. Here, LG was well aware of the '180 patent and potential for damages. Appx15000-15032; Appx15104-15111; Appx20114-20117 (Spiro Tr. 114:1-117:14).

On the other hand, *Kaufman* is on all fours with this case. There, the Court concluded that the district court's denial of prejudgment interest for a five-year delay in filing suit was an abuse of discretion where the defendant presented no evidence that it would have altered its accused product to avoid infringement and therefore no evidence of prejudice from delay. 34 F.4th at 1375. Just as in *Kaufman*, LG provided no evidence of prejudice. And as in *Kaufman*, it was an abuse of discretion for the district court to deny pre-suit interest.

**B. The District Court Abused its Discretion by Setting the Interest Rate at the Treasury Bill Rate, at Simple Interest.**

Mondis made a routine request that the district court grant prejudgment interest at the prime rate, compounded. The district court denied the request and instead awarded interest at the T-Bill rate without compounding. As a result, the

district court granted Mondis what is likely the lowest rate in a Third Circuit patent case over the last decade. That was an abuse of discretion.

To Mondis' count, there have been over 30 patent cases in the Third Circuit in which district courts have awarded prejudgment interest in the last 10 years. All of the decisions in the District of Delaware (the bulk of the cases) used the prime rate. There were three cases in New Jersey, two of which used the prime rate and one an unstated rate which is at or very close to prime.<sup>13</sup> The districts in Pennsylvania used a mix of prime rate, and various statutory rates, with only one case using the T-Bill rate compounded annually.<sup>14</sup>

Here, the district court refused to grant interest at the prime rate because Mondis is a non-practicing entity, and it did not prove it "actually paid to borrow money at commercial interest rates." Appx530. The district court ignored the

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<sup>13</sup> *Ontario Inc. v. Matrix Hosp. Furniture Inc.*, No. CV2111412KMCLW, 2022 WL 154411, at \*6 (D.N.J. Jan. 14, 2022) (3.25%); *EagleView Techs., Inc. v. Xactware Sols., Inc.*, 522 F. Supp. 3d 40, 71 (D.N.J. 2021) (prime); *Sabinsa Corp. v. Olive Lifesciences Pvt. Ltd.*, No. CV 14-4739 (JBS/KMW), 2018 WL 11355086, at \*9–10 (D.N.J. May 30, 2018) (prime).

<sup>14</sup> *Comcast Cable Commc'ns, LLC v. Sprint Commc'ns Co., LP*, 262 F. Supp. 3d 118, 148–50 (E.D. Pa. 2017), *vacated in part*, No. CV 12-859, 2017 WL 11575149 (E.D. Pa. Aug. 17, 2017); *Emcore Corp. v. Optium Corp.*, No. CIV.A. 7-326, 2010 WL 235127, at \*1–2 (W.D. Pa. Jan. 15, 2010).

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Appx15046 (§ 5.7). Thus, there was evidence in the record of an MONDIS-LG AGM

MONDIS-LG AGM. This is far more relevant evidence of the value to Mondis and the fair rate than whether Mondis took out a loan.

The district court then limited Mondis to the T-Bill rate with simple interest, on the basis that interest should mirror the post-judgment rate set in 28 U.S.C. § 1961. But that statute explicitly provides for annual compounding: 28 U.S.C. § 1961(b) (“Interest shall be computed daily to the date of payment . . . and shall be compounded annually.”). As a result, the district court granted Mondis a historically low rate, one even lower than the statutory post-judgment interest rate.

The decision on interest was highly consequential, given that the date of first infringement is 2009 and for much of the period, the Treasury Bill rate was hovering near zero. Nor was the delay the fault of Mondis. The district court’s multiple errors in ordering a new trial, both extended the length of the case and created unnecessary litigation over the “no new evidence” rule. In context, the district court’s award of a historically low prejudgment interest rate was an abuse of discretion.

## **CONCLUSION**

For the reasons above, the Court should: (1) reverse the district court's grant of a new trial and reinstate the jury's \$45 million verdict; (2) remand to the district court to review Mondis' entitlement to enhanced damages and fees under §§ 284 and 285; (3) remand for the recalculation of interest at prime compounded quarterly from April 2, 2009; and alternatively (4) if in light of LG's cross-appeal or otherwise this Court orders a third damages trial, then Mondis requests this Court to order that Mondis may submit its apportionment theory to the jury and that the trial will not be conducted under the "no new evidence" rule.

Dated: September 19, 2023

Respectfully submitted,

/s/ Martin J. Black

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Martin J. Black  
Jeffrey S. Edwards  
Brian M. Goldberg  
DECHERT LLP  
Cira Centre  
2929 Arch Street  
Philadelphia, PA 19104  
(215) 994-4000

Jeffrey B. Plies  
DECHERT LLP  
515 Congress Avenue, Suite 1400  
Austin, TX 78701  
(512) 394-3000

*Attorneys for Plaintiffs-Appellants Mondis  
Technology Ltd., Hitachi Maxell, Ltd., n/k/a  
Maxell Holdings, Ltd., and Maxell, Ltd.*



# **ADDENDUM**

## CORRECTED ADDENDUM

<b>Docket Entry/ Exhibit No.</b>	<b>Date</b>	<b>Description</b>	<b>No. of Pages</b>	<b>Appendix Page Nos.</b>
432	03/26/2019	Order re Motions <i>in Limine</i>	5	Appx151-Appx155
473	04/11/2019	Order Regarding Motion <i>in Limine</i> No. 1	2	Appx213-Appx214
558	09/24/2019	Omnibus Order on Post-Trial Motions	33	Appx220-Appx252
567	10/30/2019	Opinion and Order re Motion for Reconsideration	2	Appx253-Appx254
607	04/22/2020	Order Denying LG's Motion for JMOL and/or a New Trial regarding Invalidity and Non-Infringement	9	Appx255-Appx263
644	07/15/2020	Opinion and Order re Motion to Strike Expert Reports	3	Appx264-Appx266
657	08/17/2020	Order re Supplemental Briefing Requirement	1	Appx267
659	08/18/2020	Order Clarifying Order at DE 657	2	Appx268-Appx269
672	10/02/2020	Order and Opinion re Motion to Strike Expert Reports	20	Appx270-Appx289
689	11/06/2020	Order and Opinion re Motion for Reconsideration	6	Appx290-Appx295
706	09/08/2021	Opinion and Order re Motion to Exclude Expert Report	29	Appx296-Appx324
715	09/22/2022	Final Pretrial Order for Damages Retrial	116	Appx325-Appx440
744	01/10/2023	Opinion and Order re Motions in Limine	11	Appx442-Appx452
786	06/01/2023	Opinion re Post Trial Briefing	38	Appx508-Appx545
787	06/01/2023	Order re Post Trial Briefing	2	Appx546-Appx547

<b>Docket Entry/ Exhibit No.</b>	<b>Date</b>	<b>Description</b>	<b>No. of Pages</b>	<b>Appendix Page Nos.</b>
794	06/16/2023	Final Judgment	2	Appx548-Appx549
	01/06/2009	U.S. Patent No. 7,475,180	33	Appx550-Appx582
	02/07/2023	Bench order regarding demonstrative exhibit	4	Appx30204-Appx30205; Appx30213-Appx30214

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW JERSEY**

MONDIS TECHNOLOGY LTD.,  
HITACHI MAXELL, LTD., n/k/a  
MAXELL HOLDINGS, LTD., and  
MAXELL, LTD.,

Plaintiff,

v.

LG ELECTRONICS INC. and  
LG ELECTRONICS U.S.A., INC.,

Defendants.

Civil Action No. 15-04431(SRC/CLW)

**[PROPOSED] ORDER  
REGARDING  
THE PARTIES'  
MOTIONS *IN LIMINE***

*Electronically Filed*

**THIS MATTER** having been brought before the Court by Defendants LG Electronics Inc. and LG Electronics U.S.A., Inc.'s (collectively, "LG") Motions *in Limine* Nos. 1 through 6 (D.E. 321, 323, 325, 326, 327, and 329), and Plaintiffs' Mondis Technology Ltd., Hitachi Maxell, Ltd., n/k/a Maxell Holdings, Ltd., and Maxell, Ltd., (collectively, "Plaintiffs") Motions *in Limine* Nos. 1 through 4 (D.E. 331). The Court having considered the written submissions of the parties and the arguments of counsel at the hearing on February 20, 2019, and for the reasons set forth on the record during this hearing;

**IT IS ON THIS** 25 day of March, 2019,

1. **ORDERED** that LG's Motion *in Limine* No. 1 is **CARRIED**, pending the *Daubert* hearing scheduled for March 22, 2019; and it is further

2. **ORDERED** that LG's Motion in Limine No. 2 is hereby **GRANTED-IN-PART** as follows: Plaintiffs' expert Mr. Lamm will not be permitted to voice any opinion about commercial success until and unless the jury has been presented with sufficient evidence from which it could reasonably conclude that the disputed nexus in fact exists between the asserted claims of U.S. Patent No. 7,475,180 ("the '180 patent") and the alleged commercial success; and it is further

3. **ORDERED** that LG's Motion *in Limine* No. 3 is hereby **GRANTED-IN-PART**, with the following instructions, and based on LG's stipulation that Mondis provided LG notice of infringement pursuant to 35 U.S.C. § 287 at least as early as July 20, 2011: (i) Plaintiffs shall not use, refer to, or allude to the terms "reexamination," "*inter partes* review," or variations thereof at trial and such references shall be redacted from exhibits introduced at trial; (ii) notwithstanding the previous instruction, Mondis may display an unredacted copy of the '180 patent during opening and closing arguments; (iii) Plaintiffs shall generally refer to all proceedings before the Patent & Trademark Office ("PTO") related to the '180 patent as the "Patent Office proceedings", "the prosecution of the patents", or "the prosecution history"; (iv) Plaintiffs are precluded from offering evidence that LG was responsible for any of the reexamination or *inter partes* review proceedings, and

any indication that LG raised certain arguments for the PTO to consider during these proceedings shall be redacted from exhibits introduced at trial; and (v) Plaintiffs shall not make any reference at trial about how many times the PTO examined a prior art reference. For the sake of clarity, to the extent there are instances in which the PTO previously considered a particular prior art reference (whether alone or as part of a combination of references) relied on by LG, Plaintiffs are not precluded from presenting evidence of such instances; and it is further

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4. **ORDERED** that subject to the rulings above with respect to LG's Motion *in Limine* No. 3, LG's Motion *in Limine* No. 4 is otherwise hereby **DENIED**; and it is further

5. **ORDERED** that LG's Motion *in Limine* No. 5 is hereby **GRANTED-IN-PART** as follows: Plaintiffs may use the June 27, 2011 jury verdict from Mondis's trial against InnoLux in the Eastern District of Texas Civil Action No. 2:07-CV-565-TJW-CE, subject to an appropriate limiting instruction. However, the Court may revisit this ruling and the admissibility of the jury verdict if the case is bifurcated; and it is further

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6. **ORDERED** that LG's Motion *in Limine* No. 6 is hereby **GRANTED** as follows: LG's revenues and profits for non-accused products are hereby excluded, and Plaintiffs are not permitted to offer any evidence, testimony, or arguments regarding LG's revenues and profits for non-accused products at trial, except that

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Plaintiffs may mention that there were sales of non-accused monitors and that royalties were paid to Mondis on these monitors; nothing herein shall prevent the parties from referring to or relying on the terms of the Mondis/LG Agreement or royalties paid thereunder; and it is further

6. **ORDERED** that Plaintiffs' Motion *in Limine* No. 1 is **CARRIED**, pending the *Daubert* hearing scheduled for March 22, 2019; and it is further

7. **ORDERED** that Plaintiffs' Motion *in Limine* No. 2 is hereby **GRANTED-IN-PART** as follows: LG may refer to Mondis as a licensing enterprise, but may not argue that there is something wrong with that business model or Mondis because it does not make a product. LG is precluded from referring to the investors or ownership of Mondis or its parent company, but LG may cross-examine Mondis witness Michael Spiro regarding his financial interest in Mondis and in the outcome of the litigation. LG may, in non-pejorative terms, ask Mr. Spiro what his business is as general background and inquire, without overemphasis, how his business makes money, which is by licensing patents, and if people do not accept licenses, by initiating litigation; and it is further

8. **ORDERED** that Plaintiffs' Motion *in Limine* No. 3 is hereby **GRANTED**, and the parties are precluded from referring to the outcomes of prior Patent Office proceedings and trial verdicts regarding patents no longer in the case. Nothing in this order shall preclude the parties from referencing unasserted patents

for other purposes or that unasserted patents were included in Plaintiffs' licenses or trial verdicts; and it is further

9. **ORDERED** that Plaintiffs' Motion *in Limine* No. 4 is hereby **GRANTED-IN-PART-AND-DENIED-IN-PART** as follows: (i) Plaintiffs' motion to preclude LG's expert from offering testimony or opinions regarding the late-produced HDMI license agreement is **DENIED**; and (ii) **ORDERED** that Plaintiffs are permitted, if they choose, to submit a rebuttal expert report addressing the HDMI license agreement by March 13, 2019. If Mondis elects to submit a rebuttal expert report, LG will not be afforded a sur-reply expert report or deposition of Mondis' expert.



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Hon. Stanley R. Chesler, U.S.D.J.



IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW JERSEY

MONDIS TECHNOLOGY LTD.,  
HITACHI MAXELL, LTD., n/k/a  
MAXELL HOLDINGS, LTD., and  
MAXELL, LTD.,

Plaintiff,

v.

LG ELECTRONICS INC. and  
LG ELECTRONICS U.S.A., INC.,

Defendants.

Civil Action No. 15-04431(SRC/CLW)

**[PROPOSED] ORDER  
REGARDING  
THE PARTIES'  
DAUBERT MOTIONS**

*Electronically Filed*

**THIS MATTER** having been brought before the Court by Defendants LG Electronics Inc. and LG Electronics U.S.A., Inc.'s (collectively, "LG") Motion *in Limine* No. 1 (D.E. 321), and Plaintiffs' Mondis Technology Ltd., Hitachi Maxell, Ltd., n/k/a Maxell Holdings, Ltd., and Maxell, Ltd., (collectively, "Plaintiffs") Motion *in Limine* No. 1 (D.E. 331). The Court having considered the written submissions of the parties and the arguments of counsel at the hearings on February 20, 2019 and March 22, 2019, and the witness testimony during the liability phase of the trial, and for the reasons set forth on the record during this hearing;

IT IS ON THIS 11 day of APRIL, 2019,

1. **ORDERED** that Plaintiffs' Motion *in Limine* No. 1 is hereby **GRANTED-IN-PART AND DENIED-IN-PART**, with the following instructions:

LG's damages expert will be permitted to testify in accordance with the following opinions he presented during the March 22, 2019 hearing: (i) apportionment of the LG, TPV, and Hon Hai licenses, and (ii) apportionment based on excess sales price.

LG's damages expert will not be permitted to testify regarding his opinions based on: (i) the LG-HDMI license, and (ii) any smallest saleable patent practicing unit ("SSPPU") apportionment based on computer chip key features.

2. **ORDERED** that LG's Motion *in Limine* No. 1 is hereby **GRANTED-IN-PART AND DENIED-IN-PART**, with the following instructions:

Plaintiffs' damages expert will be permitted to testify in accordance with the opinions he presented during the March 22, 2019 hearing. However, with regards to his opinion that real-world negotiations are entered into with uncertainty about validity and infringement, his testimony shall be based solely on Mr. Spiro's testimony and shall not be based upon the patent challenge provisions of other licenses.



Hon. Stanley R. Chesler, U.S.D.J.

**UNITED STATES DISTRICT COURT  
DISTRICT OF NEW JERSEY**

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MONDIS TECHNOLOGY LTD,

Plaintiff,

v.

LG ELECTRONICS, INC.  
et al.,

Defendants.

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Civil Action No. 15-4431 (SRC)

**OPINION & ORDER**

**CHESLER, U.S.D.J.**

This matter comes before the Court on six motions: 1) the motion by Defendants LG Electronics, Inc. and LG Electronics U.S.A., Inc. (collectively, “LG”) for judgment as a matter of law under Rule 50(b), a new trial under Rule 59, and/or remittitur regarding damages and willfulness; 2) LG’s motion for judgment as a matter of law under Rule 50(b) and/or a new trial under Rule 59 regarding invalidity; 3) LG’s motion for judgment as a matter of law under Rule 50(b) and/or a new trial under Rule 59 regarding noninfringement; 4) the motion by Plaintiff Mondis Technology Ltd (“Mondis”) for enhanced damages, pursuant to 35 U.S.C. § 284; 5) Mondis’ motion for attorney fees, pursuant to 35 U.S.C. § 285; and 6) Mondis’ motion for pre-judgment and post-judgment interest. For the reasons that follow, as to the motion for a new trial on damages, the Court grants it in part, denies it in part, and reserves decision on it in part, pending further briefing; the remaining motions are denied.

This case arises from a dispute between Mondis, owner of U.S. Patent No. 7,475,180 (the “180 patent”), and LG, a television manufacturer, over allegations that LG manufactured

and sold televisions that infringed claims 14 and 15 of the '180 patent. A jury trial was held on April 3, 5, 8, 9, 10, 11 and 12, 2019. At the conclusion of the liability phase of the trial, the jury returned a verdict that claims 14 and 15 of the '180 patent were valid and infringed. At the conclusion of the damages phase of the trial, the jury returned a verdict that the infringement was willful, and awarded Mondis compensatory damages of \$45 million.

# **I. LG's motions regarding patent validity**

LG moves for judgment as a matter of law, pursuant to Rule 50(b), and/or a new trial, pursuant to Rule 59, on the issue of the invalidity of claims 14 and 15 of the '180 patent for failure to satisfy the written description requirement. At the conclusion of the liability phase of the jury trial, the jury returned a verdict stating, *inter alia*, that LG did not prove by clear and convincing evidence that claims 14 and 15 of the '180 patent are invalid. At trial, LG had argued to the jury that claims 14 and 15 of the '180 patent are invalid for failure to satisfy the written description requirement, pursuant to § 112, paragraph 1.

In moving for judgment as a matter of law and/or a new trial, LG argues that no reasonable jury could have found that the '180 patent meets the written description requirement. LG contends that there was insufficient evidence for the jury to find in Plaintiff's favor on this issue.

At the outset, the Court notes that the present case presents challenging circumstances for LG to succeed on this motion: 35 U.S.C. § 282(a) states that a "patent shall be presumed valid" and, under Federal Circuit law, "[t]o overcome the presumption of validity of patents, the accused must show that the claims lack a written description by clear and convincing evidence." Hynix Semiconductor Inc. v. Rambus Inc., 645 F.3d 1336, 1351 (Fed. Cir. 2011). As Mondis notes, the Federal Circuit has held:

[E]ven though a patentee never must submit evidence to support a conclusion by a judge or jury that a patent remains valid, once a challenger introduces evidence that might lead to a conclusion of invalidity--what we call a *prima facie* case--the patentee would be well advised to introduce evidence sufficient to rebut that of the challenger.

However, this requirement does not in substance shift the burden of persuasion, because the presumption of validity remains intact and the ultimate burden of proving invalidity remains with the challenger throughout the litigation.

Pfizer, Inc. v. Apotex, Inc., 480 F.3d 1348, 1360 (Fed. Cir. 2007) (citations omitted). “Under the law set by Congress, a jury or a court may reach a conclusion that a patent remains valid *solely* on the failure of the patent challenger’s evidence to convincingly establish the contrary.”

Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1570 (Fed. Cir. 1986). Thus, for LG to succeed on this motion, it must show that its written description case was so clear and so convincing that no reasonable jury could have found otherwise.

LG states its argument on this motion as follows:

LG’s expert, Dr. Stevenson, testified from the perspective of a person of ordinary skill in the art that the ’180 patent failed to comply with the written description requirement. Plaintiffs’ own expert, Mr. Lamm, conceded that the patent specification does not expressly recite claim 14’s limitation “an identification number for identifying at least a type of said display unit.” And contrary to what Plaintiffs promised at the summary judgment stage, Mr. Lamm did not provide any trial testimony that the inventors were in possession of the claimed invention at the time of filing.

Mr. Lamm’s failure to provide at trial the very testimony that served as Plaintiffs’ entire basis for avoiding a judgment as a matter of law at the summary judgment stage left Dr. Stevenson’s expert testimony that the ’180 patent is invalid for lack of written description unrebutted and unimpeached. There was no longer a factual dispute for the jury to decide, thus requiring entry of JMOL of invalidity.

(D.’s Br. 1.) There are two crucial flaws in this argument: 1) the assertion that Dr. Stevenson’s testimony was unimpeached; and 2) the unspoken assumption that, in the absence of a rebuttal case, the jury had no role to perform. Neither is correct.

Mondis points to several examples of how Dr. Stevenson was impeached. For example, on direct examination, Dr. Stevenson testified: “The LG TVs do not claim the -- do not contain the claimed identification number for identifying a type of display unit.” (Tr. 533:12-14.) On cross-examination, Dr. Stevenson was shown a test report on an LG television that he had generated (LG-297 at LGEMOND00183157), and he testified:

Q. You came to Dechert's Austin office and you printed out this report, correct?

A. I printed it out and I spent a fair of amount looking at the raw data just to make sure it printed out something reasonable.

Q. You printed it out and you saw that it said “display type RGB color,” right?

A. Yes.

(Tr. 665:10-17) A reasonable jury could have heard this testimony and concluded that Dr. Stevenson’s credibility as a witness had been impaired.

Second, LG’s implicit assumption that, in the absence of a rebuttal case, there was nothing for the jury to decide, is just wrong. Again, consider Orthokinetics: “Under the law set by Congress, a jury or a court may reach a conclusion that a patent remains valid *solely* on the failure of the patent challenger’s evidence to convincingly establish the contrary.” 806 F.2d at 1570. The proper role of the jury was to hear Dr. Stevenson’s testimony, weigh it, and weigh all relevant evidence to determine whether LG had met its burden of proof, which is what the jury did. The jury reached the conclusion that the claims were valid based on the failure of the patent challenger’s evidence to clearly and convincingly establish the contrary. The jury concluded that the clear and convincing standard had not been met, which appears to be a reasonable conclusion, in view of the evidence presented at trial.

This Court is not persuaded that LG’s invalidity case was so clear and so convincing that

no reasonable jury could have found claims 14 and 15 to be valid. LG's motion will be denied.

## **II. LG's motions regarding noninfringement**

LG moves for judgment as a matter of law, pursuant to Rule 50(b), and/or a new trial, pursuant to Rule 59, on the issue of infringement. At the conclusion of the liability phase of the jury trial, the jury returned a verdict stating, *inter alia*, that Plaintiffs had proven that it is more likely than not that LG infringed claims 14 and 15 of the '180 patent. LG challenges the verdict of infringement on two grounds: 1) no evidence supports the inference that LG's televisions contain the claimed communication controller; and 2) no evidence supports the inference that LG's televisions contain the claimed identification number.

As to the communication controller, LG contends, correctly, that Mondis offered no direct evidence that the accused televisions contain one. LG argues that, therefore, the jury's determination of infringement must be due to improper speculation and conjecture. LG has, however, overlooked the role of circumstantial evidence: "Although a jury is entitled to draw reasonable inferences from circumstantial evidence, reasonable inferences themselves must be more than speculation and conjecture." Phillip M. Adams & Assocs., LLC v. Dell Comput. Corp., 519 F. App'x 998, 1004 n.10 (Fed. Cir. 2013). The question is, then, whether the jury could have drawn a reasonable inference about the presence of a communications controller based on the circumstantial evidence presented to them, or whether it could only be speculation and conjecture.

Mondis, in opposition, lays out the circumstantial evidence presented to the jury on this issue: 1) LG stipulated:

All of the accused instrumentalities include at least one HDMI input port.  
All of the accused instrumentalities include a memory-storing EDID data that is connected to at least one HDMI port.

(Tr. 269:4-8.) 2) practice of the HDMI standard requires implementation of the VESA DDC standard (MON-0516 at 9 (“HDMI carries a VESA DDC channel”)); 3) LG’s televisions implement the DDC2B and I2C communications protocols, which allow bidirectional communication and allow a video source to read the television’s EDID data (Tr. 342:16-344:11); 4) Lamm explained how use of the DDC2B and I2C protocols enabled an LG television to communicate the EDID data to the video source (Tr. 345:9-352:21); 5) Lamm stated that, for an LG television to communicate the EDID data to the video source as required by the DDC2B protocol, it must have a communications controller to perform six functions that enable the communication. (Tr. 353:3-354:5.) Having presented this foundation, Lamm then stated his conclusions:

Q. In your opinion, is there any way for the accused LG televisions to implement the VESA Plug-N-Play EDID and DDC standards without using a bidirectional communication controller?

A. No. The standards require that you perform these protocol functions, and that requires a communications controller and it’s clearly bidirectional.

Q. And same question with respect to the HDMI standard. Could you implement an HDMI capability in the television without using a bidirectional communication controller to implement the DDC2B protocol?

A. No. The HDMI standard says you have to do it this way, and there is no way to not do it this way.

Q. So would it be your opinion that a bidirectional communication controller is necessarily present in all the accused products?

A. Yes, it is.

(Tr. 354:6-23.) As Mondis contends, a reasonable jury could have heard this evidence and concluded that Lamm’s conclusions were more likely than not to be correct.

Lamm’s conclusions constitute a reasoned inference from the underlying evidence and



are not speculative and conjectural. The Federal Circuit approved similar reasoning in Fujitsu Ltd. v. Netgear Inc., 620 F.3d 1321, 1327 (Fed. Cir. 2010):

We hold that a district court may rely on an industry standard in analyzing infringement. If a district court construes the claims and finds that the reach of the claims includes any device that practices a standard, then this can be sufficient for a finding of infringement. We agree that claims should be compared to the accused product to determine infringement. However, if an accused product operates in accordance with a standard, then comparing the claims to that standard is the same as comparing the claims to the accused product.

In the present case, Mondis presented evidence that the accused televisions operate in accordance with the DDC2B standard, and then compared the claims to that standard. The jury's inference that the accused televisions contain a communications controller was reasonable, not speculative and conjectural.

As to the identification number, LG argues: "there was no showing that these two bits actually identify a type of display unit in accordance with the Court's construction of the term."<sup>1</sup> (D.'s Br. 1.) The Court does not agree. As already discussed, Dr. Stevenson was cross-examined about a report he generated using a publicly available software program. The evidence indicates that the program read the two bits in question inside an LG television and correctly identified the type of display unit as "RGB color." (Tr. 665:10-17.) The evidence contained a document describing the VESA EDID 1.3 standard, which showed that bits 3 and 4 of Feature Support byte 1 are labeled, "Display Type," with values indicating "monochrome display," "RGB color display," "non-RGB multicolor display," and "undefined." (MON-0509 at 14, MONLG 00023168.) Lamm provided testimony that confirmed this understanding of the

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<sup>1</sup> To be precise, during claim construction, this Court determined that "identification number" has its ordinary meaning. (Opinion dated September 28, 2017 at 14.) The Court, in passing, also stated: "The ordinary understanding of 'identification number' is that it is for the purpose of identifying something . . ." (Id. at 13.)

EDID standard. (Tr. 333:19-334:2.) This evidence constitutes a showing that, in an actual LG television, those two bits actually identified a type of display unit, which, in the example just described, was “RGB color.” LG did not explain how this is inconsistent with the Court’s construction of “identification number.” This, along with other evidence, constitutes a sufficient basis for the jury to have determined that LG’s televisions contain the required identification number.

LG has not demonstrated that no evidence supports the jury’s determination that LG’s televisions contain the claimed communication controller or the claimed identification number.

To the contrary, substantial evidence supports the finding of infringement. LG’s motion for judgment as a matter of law, pursuant to Rule 50(b), and/or a new trial, pursuant to Rule 59, on the issue of infringement, will be denied.

### **III. LG’s motion for a new damages trial**

LG challenges the jury’s verdict in the damages phase of the trial: the jury awarded \$45 million in damages and found that LG’s infringement was willful. LG moves for judgment as a matter of law under Rule 50(b), a new trial under Rule 59, and/or remittitur regarding damages and willfulness. As to the damages verdict only, the jury verdict will be vacated.

Federal Rule of Civil Procedure 59(a)(1) states:

Grounds for New Trial. The court may, on motion, grant a new trial on all or some of the issues—and to any party—as follows:

(A) after a jury trial, for any reason for which a new trial has heretofore been granted in an action at law in federal court . . .

When reviewing damages in patent cases, the Federal Circuit applies regional circuit law to procedural issues and Federal Circuit law to substantive and procedural issues pertaining to patent law. Wordtech Sys. v. Integrated Networks Sols., Inc., 609 F.3d 1308, 1318 (Fed. Cir.

2010). Under Third Circuit law, “[a] new trial should be granted only where the great weight of the evidence cuts against the verdict and where a miscarriage of justice would result if the verdict were to stand.” Springer v. Henry, 435 F.3d 268, 274 (3d Cir. 2006).

A. *The \$45 million damages verdict*

“Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.” 35 U.S.C. § 284. The Federal Circuit has established two basic methods for determining a reasonable royalty:

Two alternative categories of infringement compensation are the patentee’s lost profits and the reasonable royalty he would have received through arms-length bargaining. . . .

The second, more common approach, called the hypothetical negotiation or the “willing licensor-willing licensee” approach, attempts to ascertain the royalty upon which the parties would have agreed had they successfully negotiated an agreement just before infringement began.

Lucent Techs., Inc. v. Gateway, Inc., 580 F.3d 1301, 1324 (Fed. Cir. 2009).

This case involves patents for electronics technology developed by Hitachi and transferred to Mondis. As Plaintiff’s expert Bratic explained in his expert report, and the parties do not dispute, the relevant patents transferred from Hitachi to Mondis are the DDC patents, which form two patent families: 1) the ’090 patent family, which relates to DDC/2 and DDC/2B technology; and 2) the ’812 patent family, which relates to DDC/CI and later technologies. (Walsh 11/28/18 Dec. Ex. A at ¶ 10.) The ’180 patent is a member of the ’090 patent family; technical expert Lamm testified that there were eight patents in the ’090 patent family, and Bratic agreed. (Tr. 1045:10-12; 1099:18-21.) Bratic contended as well that his observations, based on

review of over 25 relevant license agreements, fit with a document provided by Hitachi to a California court, which indicates that Hitachi generally applied a “DDC Royalty Norm,” which Bratic explained as follows:

At the time, the DDC Royalty Norm required licensees of the DDC Patents to pay Hitachi a royalty rate of either: (1) 1% for all DDC-compliant monitors, regardless of whether they complied with the DDC/2 and DDC/2B or the DDC/CI standard; or (2) 0.25% for monitors compliant with the DDC/2 and DDC/2B (“Pre-DDC/CI”) standard and 1.75% for monitors compliant with the DDC/CI (“Post-DDC/CI”) standard (or any smaller or larger percentage for Pre-DDC/CI and Post-DDC/CI compliant monitors so long as the sum of the corresponding royalty percentages was 2%).

(Walsh 11/28/18 Dec. Ex. A at ¶ 48.) Bratic concluded that the “implicit royalty rate” for a license for the ‘090 family of patents was 0.25%. (Id.; Id. at ¶ 222.)

Mondis contends that its prior licenses were negotiated on a “threshold basis,” charging a royalty for use of the DDC technology, rather than the use of particular patents. (Tr. 966:7-18.) The royalty rate did not change according to the number of patents licensed. (Id.)

Bratic also stated that the past licenses showed a two-tiered rate schedule with a lower pre-litigation royalty rate and a post-litigation royalty rate that was three times higher. (Walsh 11/28/18 Dec. Ex. A at ¶¶ 46, 47, 226.) Bratic characterized these rates as reflecting an “uncertainty discount,” with the pre-litigation rate at one-third of the post-litigation rate as a discount because of the uncertainty about patent validity and infringement. (Id.) Bratic concluded that, because the hypothetical negotiation rate would not include an uncertainty discount, the hypothetical negotiation would have resulted in a reasonable royalty rate of 0.75% of sales for the ’180 patent. (Walsh 11/28/18 Dec. Ex. A at ¶ 228.) Mondis therefore contends that it is entitled to a reasonable royalty of 0.75% of the sales revenue for LG’s infringing televisions. The parties did not dispute that the entire market value of the 19 million infringing

televisions was about \$10 billion. Mondis thus asked for a reasonable royalty of \$75 million. As already stated, at the conclusion of the damages phase, the jury awarded \$45 million in compensatory damages and found that LG's infringement was willful.

LG challenges the damages verdict on three grounds: 1) Plaintiff's damages theory violates the apportionment requirement; 2) Plaintiff's threshold theory violates Federal Circuit law; and 3) Plaintiff's use of a damages multiplier is legally improper.

As to the apportionment requirement, LG's argument is straightforward: Federal Circuit law requires that patent damages be apportioned to the incremental value that the patented invention adds to the end product, and the damages case presented to the jury by Mondis did not comply. The parties do not dispute the first proposition: Federal Circuit law requires that patent damages, pursuant to 35 U.S.C. § 284, be so apportioned. The post-trial dispute here concerns the question of whether Plaintiff's damages case complies with the apportionment requirement.

At the conclusion of the liability phase of the trial, the jury found that Mondis had proven that LG infringed claims 14 and 15 of the '180 patent. Pursuant to 35 U.S.C. § 284, therefore, Mondis is entitled to, at a minimum, a reasonable royalty. During the damages phase of the trial, the jury was tasked with determining that reasonable royalty. Under Federal Circuit law, "where multi-component products are involved, the governing rule is that the ultimate combination of royalty base and royalty rate must reflect the value attributable to the infringing features of the product, and no more." Ericsson, Inc. v. D-Link Sys., 773 F.3d 1201, 1226 (Fed. Cir. 2014). The question presently in dispute, then, is whether Mondis presented a damages case that satisfies this governing rule.

LG begins by pointing to the testimony of Plaintiff's damages expert, Mr. Bratic, who stated that he did not do any apportionment because he believed none was necessary. (Tr.

1161:19-21.) Plaintiff's opposition brief does not dispute that he stated this. Instead, Mondis contends that it used the approach to apportionment approved by the Federal Circuit in Commonwealth Sci. & Indus. Research Organisation v. Cisco Sys., 809 F.3d 1295, 1303 (Fed. Cir. 2015) ("CSIRO"). Mondis argues that, in CSIRO:

the apportionment function was achieved through application of comparable licenses or negotiations, which reflected "already built in apportionment." 809 F.3d at 1303. That is what happened here.

(Pl.'s Opp. Br. 7.) This the crux of Plaintiff's argument that it did indeed satisfy the apportionment requirement: the damages analysis was based on comparable licenses which reflected "already built-in apportionment," just as was done in CSIRO. This is unpersuasive, because this case is distinguishable on the facts.

First, consider the facts and holding of CSIRO, as stated by the Federal Circuit:

Fundamentally, the smallest salable patent-practicing unit principle states that a damages model cannot reliably apportion from a royalty base without that base being the smallest salable patent-practicing unit. That principle is inapplicable here, however, as the district court did not apportion from a royalty base at all. Instead, the district court began with the parties' negotiations. At trial, the district court heard evidence that, around the time of the hypothetical negotiations, the parties themselves had brief discussions regarding Cisco taking a license to the '069 patent. According to the district court's factual finding—which is supported by the testimony at trial—Cisco informally suggested \$0.90 per unit as a possible royalty for the '069 patent. The district court used this rate as a lower bound on a reasonable royalty. For the upper bound, the district court looked to the \$1.90 per unit rate requested by CSIRO in its public Rate Card license offer. Because the parties' discussions centered on a license rate for the '069 patent, this starting point for the district court's analysis *already built in apportionment*. Put differently, the parties negotiated over the value of the asserted patent, 'and no more.'

809 F.3d at 1302-03 (italics added). CSIRO concerned infringement of the '069 patent. During the damages trial, the court heard evidence that Cisco informally suggested a possible royalty of \$0.90 per unit, and that CSIRO had offered Cisco a license to the '069 patent on terms stated in a

standardized form license offer, termed the “Rate Card.” The Federal Circuit found that “this starting point for the district court’s analysis already built in apportionment.” *Id.* at 1303. The Court then explained its reasoning: “the parties negotiated over the value of the asserted patent, and no more.” *Id.* The key characteristic of this fact pattern is that the district court used, as a starting point, evidence of negotiations over the same intellectual property that was the subject of the infringement action, the ’069 patent. Because the negotiation positions used as a starting point had a scope identical to the property at issue at trial, there was no need to perform additional apportionment: the negotiation positions had the apportionment built in, because they concerned the value of the asserted patent “and no more.”<sup>2</sup> *Id.*

The Federal Circuit has held: “The essential requirement is that the ultimate reasonable royalty award must be based on the incremental value that the patented invention adds to the end product.” *Ericsson* at 1226. In *CSIRO*, the patentee presented evidence of the incremental value of the ’069 patent, as reflected in negotiation positions taken by the parties. Crucially, in the instant case, Mondis has not argued that any of the previous licenses on which it based its damages case were limited to the incremental value of the ’180 patent.

The facts of the instant case are thus distinguishable from those in *CSIRO*. Here, the starting point was a set of licenses not limited to the ’180 patent, nor to claims 14 and 15 of the

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<sup>2</sup> The Federal Circuit confirmed this reading of *CSIRO* in *Elbit*:

In *CSIRO*, the district court started with evidence of proposed royalty rates from the parties’ prior attempts at negotiating a license for the patent. *Id.* at 1300, 1302-03. We determined that the district court’s analysis was not in error because it “already built in apportionment” by starting from “discussions centered on a license rate” for the same patent, those discussions having already informally apportioned the proposed license rates to the value of the patented technology.

*Elbit Sys. Land & C4I Ltd. v. Hughes Network Sys., LLC*, 927 F.3d 1292, 1301 (Fed. Cir. 2019).

'180 patent. Instead, here is Plaintiff's description of the evidence presented at the damages trial:

The evidence at trial was that licensing is on a threshold basis where the licensee pays one price for access to the patented technology, rather than on a patent-by-patent basis. The price is to use the technology. The number of patents doesn't matter. Threshold licensees seek to avoid further exposure on products licensed and paid for. So after the agreed threshold royalty is paid, there would be no charge for additional patents, even subsequently acquired ones.

(Pl.'s Opp. Br. 9-10.) Thus, the threshold licenses here were not structured to have a scope limited to particular patents, but to particular technology. Plaintiff's opposition brief cites as an example the 2009 Mondis/LG monitor license agreement, admitted into evidence at trial. Here is how that license defined its scope:

"Licensed Patents" means any and all patents, utility patents and utility models that, at any time during the Term or before, are owned or controlled by Mondis and its Affiliates, and that would be infringed, or that Mondis contends would be infringed, by a Computer Monitor's compliance with any Video Electronics Standards Association (VESA) DDC standard, whether the DDC/2B (or prior) standard or the DDC/CI (or subsequent) standard, a full list of which patents (so far as Mondis is aware) is set out in Annex 2 hereto, together with all divisions, continuations, continuations-in-part, reissues and reexaminations thereof, and all foreign counterparts of any thereof.

(Walsh Dec. Ex. 4/Ex. 2 § 1.12, Plaintiff's Exhibit MON-0010 at MONLG 00036697.) The scope of this licensing agreement is all patents that would be infringed by a monitor's use of the VESA DDC standard. The provision states that Annex 2 contains a list of the included patents. Annex 2 identifies by number 17 United States patents, 4 German patents, and 15 Japanese patents. (Walsh Dec. Ex. 4/Annex 2, Plaintiff's Exhibit MON-0010 at MONLG 00036710-12.) Annex 2 includes the '180 patent in the list. (Id.)

The scope of this exemplary agreement differs substantially from the scope of the property found to be infringed at trial, claims 14 and 15 of the '180 patent. The 2009 license



covered 35 other patents insofar as those patents would be infringed by use of the VESA DDC standard. The 2009 license does not have apportionment built in, because the scope of the license is far beyond claims 14 and 15 of the '180 patent. As Mondis explained in its brief, the scope of the license is defined by the infringing use of the VESA DDC standard, without regard for whether claims 14 or 15 of the '180 patent are infringed.

As Mondis contends, the other licenses on which Bratic based his analysis had the same structure. None of these licenses can be said to have apportionment built in. None of these licenses reflects the value attributable to the features of the product which infringe claims 14 and 15 of the '180 patent, and no more. Ericsson, 773 F.3d at 1226.

This leads to LG's second challenge, which focuses on the threshold basis. Mondis built its damages case on evidence of previous licenses which were all structured on a threshold basis. Mondis defined threshold licensing as follows: "Threshold licensing involves a single rate for access to the technology of the patent family being licensed, regardless of the number of patents, and regardless of how many of them block." (Pl.'s Opp. Br. 12.) Mondis now claims that, also, these threshold licenses built in apportionment, but this is paradoxical: a license which is designed so that the underlying patents have no incremental value cannot at the same time be evidence of "the incremental value that the patented invention adds to the end product."<sup>3</sup> Ericsson, 773 F.3d at 1226.

By relying on this "threshold" theory of value, Mondis has truly painted itself into a corner. Having built its damages case on licenses which assigned no value to particular patents,

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<sup>3</sup> This is not to say that threshold licenses cannot be input for the reasonable royalty analysis. Although the Federal Circuit does not require that comparable licenses show "identity of circumstances," VirnetX, Inc. v. Cisco Sys., 767 F.3d 1308, 1330 (Fed. Cir. 2014), the analysis must account for the differences. Elbit, 927 F.3d at 1300. Mondis did not account for the

but only on access to DDC technology, it cannot now claim that such licenses isolate the incremental value of the '180 patent to the final product. The problem is not that these licenses are simply too different from the subject matter of the hypothetical negotiation, but that Mondis did not account for or adjust for the differences so as to satisfy the apportionment requirement.

The Federal Circuit has stated:

Prior licenses, however, are almost never perfectly analogous to the infringement action. For example, allegedly comparable licenses may cover more patents than are at issue in the action, include cross-licensing terms, cover foreign intellectual property rights, or, as here, be calculated as some percentage of the value of a multi-component product. Testimony relying on licenses must account for such distinguishing facts when invoking them to value the patented invention.

Ericsson, 773 F.3d at 1227 (citation omitted). Neither Mondis nor its witnesses accounted for the distinguishing facts when invoking the threshold licenses to value the patented invention.

LG also argues that Mondis' damages case captured the value of the VESA DDC standard rather than the incremental value of the '180 patent. Mondis, in opposition, denies this, but, given Plaintiff's definition of "threshold licensing," as just quoted, it is undeniable:

"Threshold licensing involves a single rate for access to the technology of the patent family being licensed, regardless of the number of patents, and regardless of how many of them block."

(Pl.'s Opp. Br. 12.) The "single rate for access to the technology of the patent family" is a price for access to the technology that enables use of the DDC standard. The previous licenses charged a royalty based on access to the DDC standard; Mondis has pointed to no license which charged a royalty based on use of the '180 patent alone.

Bratic testified that he relied on the opinions of Mondis' technical expert, Mr. Lamm, as to all technical questions. (Tr. 1070:18-22.) Lamm testified that four patents in the '090 family

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differences between the threshold licenses and the conditions of the hypothetical negotiation.

were standard-essential patents.<sup>4</sup> (Tr. 1050:11-20.) At trial, LG confirmed that Bratic understood from Lamm's testimony that four patents could block a manufacturer's use of the Plug and Play standard. (Tr. 1165:8-18.) LG then asked Bratic if that testimony changed Bratic's opinion that LG would have paid the full threshold rate to get a license to only one patent of those four, and it did not. (Tr. 1165:19-1166:2.) As LG contends, with this point, Bratic moved into an insupportable position, as he maintained that the result of the hypothetical negotiation was that LG would have paid top dollar for a license that LG, without licenses to the three other standard-essential patents, could do nothing with commercially. No reasonable jury could accept this proposition, that a business would willingly agree to pay the threshold rate but receive nothing usable in return. And, indeed, why would any business pay anything for a license that did not allow that business to make and sell its product? If there are four patents that are essential to the DDC2B standard, of what value is a license to only one of the four?

In the instant case, there is good reason to wonder whether the "threshold licensing" approach conflicts with the principles of CSIRO. Consider again Plaintiff's description of the evidence presented at the damages trial:

The evidence at trial was that licensing is on a threshold basis where the licensee pays one price for access to the patented technology, rather than on a patent-by-patent basis. The price is to use the technology. The number of patents doesn't matter. Threshold licensees seek to avoid further exposure on products licensed and paid for. So after the agreed threshold royalty is paid, there would be no charge for additional patents, even subsequently acquired ones.

(Pl.'s Opp. Br. 9-10.) Mondis states that, with a threshold license, the licensee pays one price for access to the patented technology. As already discussed, the 2009 Mondis/LG monitor

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<sup>4</sup> To be fully accurate, Lamm actually testified that four and one-half patents out of the eight in the '090 patent family were standard-essential patents: the '088, '970, '342 and the '180 patents are standard-essential, and the '090 patent is "half standard-essential." (Tr. 1047:21-1050:10.)

license agreement, admitted into evidence at trial, defined the scope of that license as those patents that would be infringed by a monitor's "compliance" with the VESA DDC standard, whether the DDC/2B (or prior) standard or the DDC/CI (or subsequent) standard. (Walsh Dec. Ex. 4/Ex. 2 § 1.12, Plaintiff's Exhibit MON-0010 at MONLG 00036697.) Such a license does not capture the incremental value of the patented technology apart from "value flowing to the patent from the standard's adoption." CSIRO, 809 F.3d at 1305. Mondis' threshold model rests on the predicate that the constituent (licensed) patents have no value apart from their standard-essential status, which enables them to block unlicensed use of a standard. Does the threshold model assign any value to patents apart from their ability to block? If a threshold license is negotiated without concern for the number of licensed patents, and if the royalty rate for existing licenses does not change when a new patent, such as the '180 patent, issues, is it possible for that royalty rate to capture the incremental value of a particular individual patent?

Mondis argues, in opposition, that LG has cited no case in which a court rejected use of a threshold license. That, of course, does not mean that any court has ever addressed the issue or found that a past threshold license already built in apportionment, nor does it solve the substantial problems with Plaintiff's damages case.

LG is correct that Mondis and Bratic confused the value of the '180 patent with the value of the DDC/Plug and Play standard.<sup>5</sup> The Federal Circuit has stated:

Just as we apportion damages for a patent that covers a small part of a device, we must also apportion damages for SEPs that cover only a small part of a standard. In other words, a royalty award for a SEP must be apportioned to the value of the patented invention (or at least to the approximate value thereof), not the value of the standard as a whole. A jury must be instructed accordingly. Our decision does

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<sup>5</sup> At trial and in the post-trial briefing, the parties appeared to use the terms "DDC standard" and "Plug and Play standard" interchangeably. (See Tr. 968:2-3: "DDC2B is the core of the Plug-N-Play Technology.")

not suggest that all SEPs make up only a small part of the technology in the standard. Indeed, if a patentee can show that his invention makes up the entire value of the standard, an apportionment instruction probably would not be appropriate.

Turning to the value of a patent's standardization, we conclude that Supreme Court precedent also requires apportionment of the value of the patented technology from the value of its standardization. . . . In other words, the patent holder should only be compensated for the approximate incremental benefit derived from his invention.

This is particularly true for SEPs. When a technology is incorporated into a standard, it is typically chosen from among different options. Once incorporated and widely adopted, that technology is not always used because it is the best or the only option; it is used because its use is necessary to comply with the standard. In other words, widespread adoption of standard essential technology is not entirely indicative of the added usefulness of an innovation over the prior art. This is not meant to imply that SEPs never claim valuable technological contributions. We merely hold that the royalty for SEPs should reflect the approximate value of that technological contribution, not the value of its widespread adoption due to standardization.

Because SEP holders should only be compensated for the added benefit of their inventions, the jury must be told to differentiate the added benefit from any value the innovation gains because it has become standard essential. Although the jury, as the fact finder, should determine the appropriate value for that added benefit and may do so with some level of imprecision, we conclude that they must be told to consider the difference between the added value of the technological invention and the added value of that invention's standardization.

Ericsson, 773 F.3d at 1232-33 (citations omitted). This states clearly that, when dealing with a standard-essential patent, the value added by the patented technology must be differentiated from the value added by the standardization of that technology. At trial, Mondis presented extensive evidence – the licensing history – about the value of the DDC standard and the royalties that various manufacturers agreed to pay in order to manufacture monitors and televisions which incorporated the standard. No attention was paid to “the difference between the added value of the technological invention and the added value of that invention’s standardization.” Id. at 1233.

Mondis did not address the question of what value was added by the invention's standardization. This is error under the Federal Circuit's decision in CSIRO: the Federal Circuit found that the district court, which had increased the royalty rate because of the patent's status as standard-essential, had erred. 809 F.3d at 1305. And the Federal Circuit did not stop there: it proceeded to question whether the starting rates (the royalty rate bounds of \$.090 and \$1.90)<sup>6</sup> for the analysis had been misvalued because of considerations of standardization, and instructed the district court, on remand, to "consider whether the initial rates taken from the parties' discussions should be adjusted for standardization." Id. at 1305-06.

Mondis, in opposition, contends that Mr. Bratic accounted for differences between the comparable licenses and the hypothetical negotiation, and points to the adjustment of a 1% rate to .25%. Mondis does not explain this in the opposition brief, but it appears to refer to Bratic's efforts to separate the royalty rate for the '090 family of patents from the royalty rate for patents from the '812 family. Bratic did thus make some effort to adjust for the difference in scope between the comparable licenses and the hypothetical negotiation: he attempted to carve out the value contributed by the '090 patent family. The problem, of course, is that the entire '090 patent family is not at issue in this case; only one patent from that family, the '180 patent, is at issue. A damages model that begins with previous threshold licenses, and attempts to adjust the royalty based on patent family membership, has taken a step in the right direction, but still has not apportioned to the incremental value added by the '180 patent.

In its opposition, Mondis contends that "Mr. Bratic's opinion about the value of the '180 patent was based on the patent's own technical value." (Pl.'s Opp. Br. 22.) While it is true that

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<sup>6</sup> Note that these are the same rates that the Federal Circuit determined reflected "already built in apportionment." Id. at 1303.

Bratic did state opinions about the value of the '180 patent, that does not undo the fact that the “threshold license” theory treated the value of each individual patent as equal to the value of the standard, contrary to Ericsson.

LG also argues that Mondis has violated the evidentiary corollary to the Federal Circuit’s governing rule:

Our cases have added to that governing legal rule an important evidentiary principle. The point of the evidentiary principle is to help our jury system reliably implement the substantive statutory requirement of apportionment of royalty damages to the invention's value. The principle, applicable specifically to the choice of a royalty base, is that, where a multi-component product is at issue and the patented feature is not the item which imbues the combination of the other features with value, care must be taken to avoid misleading the jury by placing undue emphasis on the value of the entire product. It is not that an appropriately apportioned royalty award could never be fashioned by starting with the entire market value of a multi-component product—by, for instance, dramatically reducing the royalty rate to be applied in those cases—it is that reliance on the entire market value might mislead the jury, who may be less equipped to understand the extent to which the royalty rate would need to do the work in such instances.

Ericsson, 773 F.3d at 1226-27. LG argues that Mondis misled the jury during the damages phase by placing undue emphasis on the value of the entire product. The jury’s decision here is opaque: we know the verdict, but not the underlying reasoning, and cannot know what rationale led them to their decision. Nonetheless, the Court agrees with LG that Mondis repeatedly emphasized the entire market value of LG’s accused televisions, \$10 billion, and that this may have skewed the damages horizon for the jury. As the Federal Circuit has held:

We have articulated that, where multi-component products are accused of infringement, the royalty base should not be larger than the smallest salable unit embodying the patented invention. We have cautioned against reliance on use of the entire market value of a multi-component product that includes a patented component because it cannot help but skew the damages horizon for the jury, regardless of the contribution of the patented component to this revenue.

Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc., 894 F.3d 1258, 1270 (Fed. Cir. 2018). It seems quite possible that Mondis may have placed undue emphasis on the value of the entire product and did not particularly take care to avoid skewing the damages horizon for the jury. Mondis did not offer the jury a method to estimate the incremental value of the '180 patent from the much broader prior licenses.

The Court finds it possible, even probable, that Mondis' overall approach did skew the damages horizon for the jury, even if it did not mislead the jury. As already noted, Mondis failed to adjust for the differences between the threshold approach to valuation in the previous licenses from the apportioning approach to patent damages required by the Federal Circuit. Moreover, Mondis did not attempt to disentangle the incremental value added by the '180 patent to the finished product from the value of the DDC standard captured in the prior licenses.

Third, LG argues that Mondis' use of a damages multiplier – which Mondis called the “uncertainty discount” – is legally improper and not supported by substantial evidence. LG contends that the use of the damages multiplier conflicts with Federal Circuit law, citing ResQNet.com, Inc. v. Lansa, Inc., 594 F.3d 860, 869 (Fed. Cir. 2010) (citation omitted), which held:

At all times, the damages inquiry must concentrate on compensation for the economic harm caused by infringement of the claimed invention. . . .

Thus, the trial court must carefully tie proof of damages to the claimed invention's footprint in the market place.

LG argues that the use of the damages multiplier allows compensation based not on economic harm caused by infringement of the claimed invention, as well as compensation not carefully tied to the claimed invention's footprint in the marketplace. LG argues, furthermore, that the damages multiplier is a penalty provision intended to discourage licensees from challenging the



validity of any licensed patents.

In opposition, Mondis argues that the tripling of the royalty rate to remove the effect of the uncertainty discount was both supported by substantial evidence and legally proper.<sup>7</sup> First, Mondis contends that LG's expert Hansen agreed that this was appropriate, which is correct, although Hansen did not testify that he believed that tripling the royalty rate was appropriate in this case. Hansen testified:

A. Uncertainty generally results in a little bit lower royalty rate, so, a patent that's determined to be valid and infringed, there's upward pressure on the rate to pay for such a license.

Q. Right. And that upward pressure, you criticized Mr. Bratic for saying that the rate would have been three times the DDC norm rate of .25 percent. You thought that was too much upward pressure. Right?

A. Yes. Nobody's ever paid that.

(Tr. 1230:6-14.) Furthermore, Hansen also testified:

Q. So, an upward evaluation is something that's appropriate and it's up to the jury to decide how much that should be in this case based on the facts that they've heard. Correct?

A. Yes. It's the jury's decision.

(Tr. 1232:13-17.) LG's expert thus conceded that an increase in damages due to the uncertainty discount is a proper matter for the jury to consider.

Moreover, Mondis argues correctly that Hansen's concession is in accord with Federal

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<sup>7</sup> In short, the theory here is that a patent that is known to be valid and infringed has a greater market value than one for which there is uncertainty about validity and infringement. As Bratic pointed out, the hypothetical negotiation presumes validity and infringement: "now, under the hypothetical negotiation, we have the ironclad presumption of validity and infringement." (Tr. 1085:4-6.) This is correct under Federal Circuit law. See Lucent, 580 F.3d at 1325 ("The hypothetical negotiation also assumes that the asserted patent claims are valid and infringed.") Thus, Mondis argues, it is appropriate for the jury to increase the award of compensatory damages to reflect the absence of uncertainty about validity and infringement.

Circuit law. The Federal Circuit has recognized the appropriateness of considering an uncertainty discount in the damages inquiry. This is shown most clearly in Spectralytics, Inc. v. Cordis Corp., 649 F.3d 1336, 1347 (Fed. Cir. 2011), in which the Federal Circuit reviewed a jury verdict awarding a reasonable royalty for compensatory patent infringement damages. In deciding a post-trial motion, the district court had found that the jury’s verdict, which reflected a “very deep” uncertainty discount, was not unreasonable:

In this case, the significance of the price paid by Preco to acquire Spectralytics in 2003 depends on what that price suggests about the outcome of the hypothetical license negotiation in 1998. The jury could reasonably have concluded that the former had little to do with the latter. At the time of the 2003 sale, Spectralytics knew that the value of the '277 patent ranged from nothing to possibly tens of millions of dollars, depending on (among other things) whether Noble and Cordis were infringing and whether, if sued for infringement, Noble and Cordis could successfully challenge the patent’s validity. Spectralytics suspected that Noble and Cordis might be infringing the '277 patent and hoped that the patent would survive any challenge to its validity, but Spectralytics did not really know for certain, and it could not really know for certain without paying millions of dollars in legal fees to launch lengthy and risky litigation. Thus, the value assigned to the '277 patent in 2003 would have reflected a very deep discount.

Spectralytics, Inc. v. Cordis Corp., 650 F. Supp. 2d 900, 915-16 (D. Minn. 2009). The Federal Circuit reviewed and affirmed, specifically stating that it agreed with the district court that it was appropriate for the jury to weigh this “very deep discount” in computing damages. 649 F.3d at 1347. In short, the Federal Circuit agreed that it was reasonable for the jury to apply a pre-litigation uncertainty discount which deeply reduced the patent’s value. LG has not pointed to any material difference between the uncertainty discount weighed by the jury in Spectralytics and the uncertainty discount in the instant case.

Similarly, recognition of the uncertainty discount is implicit in this statement in Prism Techs. LLC v. Sprint Spectrum L.P., 849 F.3d 1360, 1369 (Fed. Cir. 2017): “the earlier suit’s settlement figure may be too low to the extent that it was lowered by the patent owner’s

discounting of value by a probability of losing on validity or infringement.” Discounting the value of a patent to adjust for uncertainty about validity or infringement appears to be uncontroversial in Federal Circuit jurisprudence.

Because LG’s expert conceded that it was reasonable for the jury to consider application of the uncertainty discount in determining a reasonable royalty, and because the Federal Circuit recognizes such an adjustment to patent value to be proper, the only remaining question is whether the evidence supports the extent to which the jury adjusted damages. The parties agree that all we have from the jury is the \$45 million verdict, with no explanation of the underlying computation. The parties agree that a jury which applied a .25% royalty rate to the \$10 billion in revenue would award \$25 million. The parties also are in agreement in speculating that the \$45 million verdict likely includes a \$20 million upward adjustment. (See LG’s Br. 26 n.9; Pl.’s Opp. Br. 16.) If this speculation is correct, the jury applied the .25% royalty rate to the \$10 billion in revenue, and then adjusted the \$25 million upward by 80% (\$20 million). The question is, then, whether the evidence supports an 80% upward adjustment.

This Court concludes that it does, for two reasons. First, on cross-examination, LG’s expert Hansen admitted that he had testified in a prior case that he had adjusted for the uncertainty discount by tripling the royalty rate:

Q. Do you recall, sir, testifying in a case in the United States District Court for the Western District of Pennsylvania called University of Pittsburgh of the Commonwealth System of Higher Education vs. Varian?

A. I do.

Q. Did you testify in that case under oath?

A. Yes, I did.

MR. BLACK: And could we pull up Page 97 of the transcript of that case, and I'd like you to highlight lines 4 to 13 please.

Q. Did someone, not me, ask you the question:

"And did you, using that provision, did you attempt to demonstrate what the impact of an assumption of validity and infringement would have with respect to the royalty rates at issue in the Stanford license?"

Did you give this answer?

"Yes. For the royalty rates in this particular license, I simply took the effective royalty rates that I calculated, multiplied them by three to reflect validity and infringement. So this would be illustrative of the range of rates after accounting for validity and infringement which would range in the percentages on the far right-hand column."

Do you recall that?

A. Yes.

(Tr. 1230:23-1231:22.) The jury was entitled to conclude from this evidence that tripling the royalty to adjust for the uncertainty discount could be reasonable and valid.

Second, Mondis points to the evidence about the Innolux jury verdict. The jury in this case heard testimony from both Bratic and Spiro about the 2011 Innolux jury verdict. Spiro testified:

Q. All right. So, there are three defendants when the trial started and we're down to one defendant. Who's that defendant?

A. We were left just with Innolux.

Q. And on June 27, 2011, what happened?

A. We got a verdict.

Q. And what was the rate that the jury determined for televisions in that case?

A. That was three-quarters of a percent.

Q. And which patents did the verdict for televisions cover?

A. They covered the 2B patents. That was the three that I mentioned before, all the 2B patents.

Q. Which just -- do you know the patent numbers that were actually --

A. Yes. Again, based on the last three numbers, it's the '180, the '342 and the '090.

Q. Okay. Did Innolux appeal the award, the jury verdict?

A. Yes, they did. But they eventually settled it.

Q. Did the settlement involve any reduction of the jury's award?

A. No, none at all. They paid the full rate, whatever was determined.

Q. So, under the agreement with Innolux, what royalty rate did Innolux pay Mondis for the DDC patents for its televisions?

A. It was three-quarters of a percent, 0.75 percent.

(Tr. 989:17-990:19.)

On cross-examination, Mr. Bratic testified:

Q. All right, sir. Let's move on to another topic you covered in your direct testimony, namely that the Innolux verdict confirmed -- further confirmed your tripling opinion, right?

A. No, I don't believe I said that.

Q. Well, you did discuss the Innolux decision as confirmatory of your .75 percent rate, right?

A. Of the .75 percent rate, but there was no trebling.

Q. Okay.

A. That was a verdict that reflected validity and infringement because the jury reached a conclusion of a royalty of .75 percent for TVs.

Q. I see. So you're saying you're not exactly sure how they got there, but they wound up at the same place you did through tripling. Is that right?

A. No, the point -- no, not quite.

Q. Okay. Well, at the end of the day, the jury there found a rate of .75 percent applicable for televisions, right?

A. Correct.

Q. And that's the same -- same number in that red box in your summary chart, right?

A. It's consistent with that number.

(Tr. 1146:11 - 1147:8.) Although Bratic denied that the Innolux jury's .75% royalty rate included a tripling uncertainty adjustment, he admitted that the jury verdict "reflected validity and infringement."

The jury in this case thus heard that the Innolux jury awarded damages using a royalty rate of .75%, and that Innolux eventually settled the case by agreeing to pay that rate. The jury also heard that Mondis believed that the .25% royalty rate should be tripled to adjust for the uncertainty discount. The jury had substantial evidence to support a determination that an 80% increase in royalties to adjust for the uncertainty discount was proper and supported by the evidence, since Innolux agreed to a settlement paying triple the .25% rate.

Furthermore, Mondis aptly cites Prism, 849 F.3d at 1369: "a settlement reached after a determination of liability (though subject to appeal) is particularly reliable as evidence of value." This is entirely on point, since the Innolux settlement was reached after a determination of validity and infringement. Thus, under Prism, it is particularly reliable as evidence of value. In this case, the parties agree that the jury seems to have chosen a royalty rate that reflects an 80% upward adjustment for the uncertainty discount, which is somewhere in between the .25% rate that LG thought was reasonable, and the .75% rate Mondis thought

was reasonable. The evidence supports the jury's decision.

In conclusion, while this Court has determined that Plaintiff's damages case is insufficient, as a matter of law, to support the jury's damages verdict, the problem lies in the failure to apportion, not in the use of the uncertainty discount. In a new trial, Plaintiff may again present the jury with its uncertainty discount theory.

The present case is similar to Wordtech Sys. v. Integrated Networks Sols., Inc., 609 F.3d 1308, 1322 (Fed. Cir. 2010), in which the Federal Circuit, applying the law of the Ninth Circuit, reversed the denial of a Rule 59(a) motion and remanded for a new trial on damages. In short, in Wordtech, the Federal Circuit determined that the plaintiff's comparable license evidence did not support the verdict. Id. In the instant case, this Court finds that Mondis failed to present a damages case which satisfies the apportionment requirement fundamental to the law of patent infringement damages:

When the accused technology does not make up the whole of the accused product, apportionment is required. The ultimate combination of royalty base and royalty rate must reflect the value attributable to the infringing features of the product, and no more.

Finjan, Inc. v. Blue Coat Sys., 879 F.3d 1299, 1309 (Fed. Cir. 2018); Garretson v. Clark, 111 U.S. 120, 121 (1884) ("The patentee . . . must in every case give evidence tending to separate or apportion the defendant's profits and the patentee's damages between the patented feature and the unpatented features, and such evidence must be reliable and tangible, and not conjectural or speculative.") In making its case for damages, Mondis failed to remove the value of non-infringing features from its damages estimates. This Court finds that, as a matter of law, Plaintiff's damages case did not satisfy the apportionment requirement. As in Finjan, "[f]urther apportionment was required to reflect the value of the patented technology compared

to the value of the unpatented elements.” 879 F.3d at 1311.

As already stated, under Third Circuit law, “[a] new trial should be granted only where the great weight of the evidence cuts against the verdict and where a miscarriage of justice would result if the verdict were to stand.” Springer, 435 F.3d at 274. This standard has been met here. Plaintiff’s damages case, as a matter of law, is insufficient to support the damages verdict, due to the failure to apportion. Because Mondis failed to comply with the apportionment requirement, the jury did not hear evidence sufficient to support the verdict. This Court determines that a miscarriage of justice would occur if the verdict were allowed to stand. The Third Circuit’s requirements for granting a motion for a new trial, pursuant to Rule 59, have been met.

The Court concludes that Plaintiff’s damages case is insufficient, as a matter of law, to support the jury’s damages verdict. The damages verdict will be vacated. The only remaining question is one that has not been briefed: has Plaintiff now waived its right to a damages award? In Promega Corp. v. Life Techs. Corp., 875 F.3d 651, 666 (Fed. Cir. 2017), the Federal Circuit held:

But, as explained above, a patent owner may waive its right to a damages award when it deliberately abandons valid theories of recovery in a singular pursuit of an ultimately invalid damages theory. When a plaintiff deliberately takes a risk by relying at trial exclusively on a damages theory that ultimately proves unsuccessful, and, when challenged, does not dispute that it failed to present an alternative case for damages, a district court does not abuse its discretion by declining to give that plaintiff multiple chances to correct deficiencies in its arguments or the record.

The parties must now have an opportunity to brief this issue, so that this Court may decide whether, having vacated the damages verdict, to grant the motion for a new damages trial. The parties shall confer and present to the Court a briefing schedule for this next phase of hearing the motion for a new trial.



*B. The willfulness verdict*

LG moves for judgment as a matter of law or, in the alternative, a new trial, on the ground that no reasonable jury could have found that LG's infringement was willful. "We review the denial of a motion for JMOL . . . under the law of the pertinent regional circuit." Power Integrations, 843 F.3d at 1326. "A motion for judgment as a matter of law under Federal Rule of Civil Procedure 50(a) should be granted only if, viewing the evidence in the light most favorable to the nonmovant and giving it the advantage of every fair and reasonable inference, there is insufficient evidence from which a jury reasonably could find liability." Avaya Inc., RP v. Telecom Labs, Inc., 838 F.3d 354, 373 (3d Cir. 2016).

In Halo Elecs., Inc. v. Pulse Elecs., Inc., 136 S. Ct. 1923, 1933 (2016), the Supreme Court revised the willfulness standard, eliminating the objective prong from the standard, but leaving the subjective prong intact: "The subjective willfulness of a patent infringer, intentional or knowing, may warrant enhanced damages, without regard to whether his infringement was objectively reckless." Under this revised standard, Mondis bore the burden of proof at trial, by a preponderance of the evidence, that LG's infringement was subjectively intentional or knowing.

In brief, this Court cannot conclude that there was insufficient evidence to support the jury's finding of willfulness. Ample evidence shows that the parties had been litigating and negotiating licenses regarding the DDC patents. It is undisputed that Mondis first sued LG, along with other defendants, for infringement of the '090 and other patents in 2007, and that LG resolved that litigation by entering into a settlement agreement with Mondis in September of 2009. It is also undisputed that this original case against LG went to trial after LG settled, and that, on June 27, 2011, the jury returned a verdict that found that the televisions of

defendant Innolux infringed claim 14 of the '180 patent, which is at issue in the present case.

The jury in the present case heard extensive testimony about the history of the dispute from Mr. Spiro, among others. (See, e.g., Tr. 98:9-128:9.) It is also undisputed that, in the instant case, the period of alleged infringement extended from the date of issuance of the '180 patent in 2009 until the '180 patent expired in February of 2014. There is ample evidence from which a jury could reasonably conclude that LG's infringement of the '180 patent through the manufacture and sale of televisions was, for at least some of the period of alleged infringement, done with knowledge that LG was infringing asserted claims of the '180 patent. Substantial evidence supports the jury's determination of willful infringement. The motion for judgment as a matter of law or, in the alternative, a new trial, on the matter of the jury's finding of willfulness, will be denied.

The decision to vacate the jury's damages verdict impacts several pending motions. Because the issue of the amount of damages is now unresolved, the motion for enhanced damages, pursuant to 35 U.S.C. § 284, is premature: there is no damages award to enhance. Because this case has not reached final judgment, the motion for a declaration of an exceptional case, pursuant to 35 U.S.C. § 285, is also premature. For the same reason, the motion for prejudgment and post-judgment interest is premature. These premature motions will be denied.

For these reasons,

**IT IS** on this 24<sup>th</sup> day of September, 2019

**ORDERED** that LG's motion for judgment as a matter of law under Rule 50(b) and/or a new trial under Rule 59 regarding invalidity (Docket Entry No. 486) is **DENIED**; and it is further

**ORDERED** that LG's motion for judgment as a matter of law under Rule 50(b) and/or

a new trial under Rule 59 regarding noninfringement (Docket Entry No. 487) is **DENIED**; and it is further

**ORDERED** that LG's motion for judgment as a matter of law under Rule 50(b), a new trial under Rule 59, and/or remittitur regarding damages and willfulness (Docket Entry No. 489) is **GRANTED** in part, **DENIED** in part, and decision is **RESERVED** in part pending further briefing; and it is further

**ORDERED** that the jury verdict returned on April 12, 2019, finding that LG's infringement was willful and awarding \$45 million in compensatory damages, is **VACATED** in part, and the jury's verdict awarding \$45 million in compensatory damages is hereby **VACATED**, but the jury verdict of willful infringement is unchanged; and it is further

**ORDERED** that the parties shall confer and present to the Court a schedule for briefing the issue of the application of Promega to the motion for a new trial on damages; and it is further

**ORDERED** that Mondis' motion for enhanced damages (Docket Entry No. 493), pursuant to 35 U.S.C. § 284, is **DENIED** without prejudice as premature; and it is further

**ORDERED** that Mondis' motion for attorney fees (Docket Entry No. 491), pursuant to 35 U.S.C. § 285, is **DENIED** without prejudice as premature; and it is further

**ORDERED** that Mondis' motion for pre-judgment and post-judgment interest (Docket Entry No. 495) is **DENIED** without prejudice as premature.

s/ Stanley R. Chesler  
Stanley R. Chesler, U.S.D.J.

**UNITED STATES DISTRICT COURT  
DISTRICT OF NEW JERSEY**

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MONDIS TECHNOLOGY LTD. et al.,

Plaintiffs,

v.

LG ELECTRONICS, INC.  
et al.,

Defendants.

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Civil Action No. 15-4431 (SRC)

**OPINION & ORDER**

**CHESLER, U.S.D.J.**

This matter comes before the Court on the motion for reconsideration of this Court's Opinion and Order, entered September 24, 2019, by Plaintiffs Hitachi Maxell, Ltd., n/k/a Maxell Holdings, Ltd., Maxell, Ltd., and Mondis Technology Ltd. (collectively, "Mondis.") Defendants LG Electronics, Inc. and LG Electronics U.S.A., Inc. (collectively, "LG") oppose the motion. For the reasons that follow, the motion will be denied.

While the Opinion and Order entered September 24, 2019 addressed six motions, Mondis here moves for reconsideration of that aspect of the Order that vacated the jury's damages award.

Under Third Circuit law, a motion for reconsideration:

should be granted only where the moving party shows that at least one of the following grounds is present: (1) an intervening change in the controlling law; (2) the availability of new evidence that was not available when the court [made its initial decision]; or (3) the need to correct a clear error of law or fact or to prevent manifest injustice.

In re Energy Future Holdings Corp., 904 F.3d 298, 311 (3d Cir. 2018). Mondis fails to demonstrate that one or more of these grounds is present, justifying a grant of their motion.

Mondis first argues that this Court overlooked the Federal Circuit's decision in Elbit Sys. Land & C4I Ltd. v. Hughes Network Sys., LLC, 927 F.3d 1292, 1294 (Fed. Cir. 2019). As LG points out, this Court both considered Elbit and discussed it in the Opinion. Elbit was not overlooked.

The arguments that follow in Mondis' motion fail to track the Third Circuit's requirements for a grant of reconsideration, as they assert neither an intervening change in controlling law, nor new evidence, nor a clear error of law or fact. Instead, they rehash arguments that Mondis made in briefing the original motion, reviewing the evidence which Mondis believes supports the jury verdict. The moving brief makes clear that Mondis disagrees with this Court's decision to vacate the jury's damages verdict. It does not, however, provide a basis for reconsideration.

Mondis has failed to persuade this Court that there is a basis to reconsider the Order vacating the jury verdict on damages. The motion for reconsideration is denied.

For these reasons,

**IT IS** on this 30<sup>th</sup> day of October, 2019

**ORDERED** that Mondis' motion for reconsideration (Docket Entry No. 560) is **DENIED**.

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s/ Stanley R. Chesler  
Stanley R. Chesler, U.S.D.J.

UNITED STATES DISTRICT COURT  
DISTRICT OF NEW JERSEY

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MONDIS TECHNOLOGY LTD,

Plaintiff,

v.

LG ELECTRONICS, INC.

et al.,

Defendants.

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Civil Action No. 15-4431 (SRC)

**OPINION & ORDER**

**CHESLER, U.S.D.J.**

This matter comes before the Court on the motion by Defendants LG Electronics, Inc. and LG Electronics U.S.A., Inc. (collectively, “LG”) for judgment as a matter of law under Rule 50(b), a new trial under Rule 59, and/or remittitur regarding damages and willfulness. This Court had previously considered this motion and, in the Opinion of September 24, 2019, granted the motion in part, denied it in part, and reserved decision in part, pending further briefing. The Court ordered supplementary briefing on the question of the application of the Promega case. After the supplementary briefing was completed, the Court held further oral argument on April 8, 2020. For the reasons that follow, the Court grants the motion for a new trial, and denies both the motion for judgment as a matter of law and the motion for remittitur.

In the Order of September 24, 2019, this Court held that the jury verdict returned on April 12, 2019, finding that LG’s infringement was willful and awarding \$45 million in compensatory damages, was vacated in part: the Court vacated the jury’s verdict awarding \$45 million in compensatory damages, but did not alter the jury verdict of willful infringement.

The parties then submitted supplemental briefing on the question of whether Plaintiff had waived its right to a damages award, pursuant to Promega Corp. v. Life Techs. Corp., 875 F.3d 651, 666 (Fed. Cir. 2017), and argued this question at the telephonic hearing.

The Court concludes that Plaintiff has not waived its right to a damages award, and that Promega is distinguishable. In Promega, the Federal Circuit held:

But, as explained above, a patent owner may waive its right to a damages award when it deliberately abandons valid theories of recovery in a singular pursuit of an ultimately invalid damages theory. When a plaintiff deliberately takes a risk by relying at trial exclusively on a damages theory that ultimately proves unsuccessful, and, when challenged, does not dispute that it failed to present an alternative case for damages, a district court does not abuse its discretion by declining to give that plaintiff multiple chances to correct deficiencies in its arguments or the record.

875 F.3d at 666. This Court has ruled that the principal damages theory Mondis pursued at trial, the threshold theory, is not valid under Federal Circuit law, for failure to satisfy the apportionment requirement. The Court had queried whether Mondis, in its pursuit of this invalid damages theory, had abandoned all valid theories, and whether the Promega decision controlled the outcome of this case. The Court concludes that Promega does not determine the proper remedy for the defects in Mondis' damages case at trial.

At the hearing, Mondis argued persuasively that, under both Federal Circuit and Third Circuit law, this Court cannot properly grant LG's motion for judgment as a matter of law. This is correct. Under Third Circuit law:

Entry of judgment as a matter of law is a sparingly invoked remedy, granted only if, viewing the evidence in the light most favorable to the nonmovant and giving it the advantage of every fair and reasonable inference, there is insufficient evidence from which a jury reasonably could find liability.

Marra v. Phila. Hous. Auth., 497 F.3d 286, 300 (3d Cir. 2007) (citations omitted). At trial, LG's

expert, Mr. Hansen, based on a theory that apportioned, testified that his expert opinion was that Mondis was entitled to damages in the amount of \$1.9 million. Hansen's opinion constitutes sufficient evidence from which a jury might reasonably award damages.

The parties do not dispute that the Federal Circuit reviews JMOL motions under the law of the regional Circuit. SRI Int'l, Inc. v. Cisco Sys., 918 F.3d 1368, 1380 (Fed. Cir. 2019). In SRI, the district court was in the Third Circuit, and the Federal Circuit applied the Marra standard, quoted above. Id. Viewing the evidence in the light most favorable to the nonmovant, Mondis, the Court cannot conclude that there was insufficient evidence from which the jury could reasonably award some amount of damages.<sup>1</sup> This Court may not, therefore, grant LG's Rule 50(b) motion. As Mondis argued, that option is not available. This Court need not strain to apply Promega, because it may not be construed to contradict the Third Circuit law which is controlling on this issue.<sup>2</sup> Promega cannot justify a grant of JMOL under these facts. LG's motion for judgment of no damages, as a matter of law, must be denied.

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<sup>1</sup> Moreover, LG contends, incorrectly, that this Court, in its Opinion vacating the jury's damages award, "rejected Plaintiffs' reliance on their license agreements." (LG Supp. Br. 17.) This Court found Plaintiff's threshold theory to violate the Federal Circuit's apportionment requirement; it did not reject the use of prior licenses as evidence relevant to the Georgia-Pacific analysis.

<sup>2</sup> The Court observes, however, that Mondis effectively distinguished Promega on the facts: the Federal Circuit found that the patentee had expressly disavowed any claim to reasonable royalty damages, relying exclusively on a lost profits damages theory at both trial and during litigation of the subsequent JMOL motion. 875 F.3d at 661. After an adverse Supreme Court decision invalidated the lost damages approach, the Federal Circuit held that, in essence, the patentee, having waived any reasonable royalty, had run out of options for patent damages. Id. at 666. As the Federal Circuit stated, it was "an unusual case," and it is not analogous. Id. LG has not persuaded this Court that Mondis has run out of options for a patent damages case. Certainly, having put on a case seeking reasonable royalties, Mondis cannot be said to have disavowed a claim to reasonable royalty damages, as Promega had. Mondis may have offered expert testimony for an invalid theory, but that is quite different from waiving an entire category of damage theories, as Promega did.



In the alternative, LG moves for a new trial, or remittitur to reduce the amount of damages to \$1,904,998 million. Federal Rule of Civil Procedure 59(a) states:

The court may, on motion, grant a new trial on all or some of the issues—and to any party—as follows: (A) after a jury trial, for any reason for which a new trial has heretofore been granted in an action at law in federal court . . . .

“The authority to grant a new trial resides in the exercise of sound discretion by the trial court.”

Wagner v. Fair Acres Geriatric Ctr., 49 F.3d 1002, 1017 (3d Cir. 1995). This Court finds that, having already vacated the jury’s damages verdict, it is in the interest of justice to grant the motion for a new trial on the amount of damages. Although, at trial, Mondis relied principally on a theory of damages that did not meet the requirements of Federal Circuit law, the record contains substantial evidence from which a reasonable jury could make a damages determination that would be legally valid. The best and most just remedy here is a new trial. Indeed, LG sought a new damages trial as one outcome in its initial motion to vacate the damages verdict.<sup>3</sup> Although, in its initial response to LG’s moving brief, Mondis sought to defend the jury award, once this Court issued its decision to vacate the damages verdict, and Ordered supplementary briefing, Mondis requested a new damages trial.

Mondis now argues that one important reason why there should be a new trial is that 35 U.S.C. § 284 requires the Court to award damages not less than a reasonable royalty. There is merit to what Mondis contends, even if it may not be as absolute as Mondis would like. The

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<sup>3</sup> In the supplemental briefing, LG shifted course and argued that the Court should not allow Mondis to proceed with a new trial premised on an undisclosed theory of damages. LG here conflates two distinct issues. The Court today grants LG’s motion for a new trial, but does not have before it any application from Mondis to present a new damages theory at that trial. While this may well be the subject of future litigation in this case, the Court will cross that bridge if and when it comes to it. Furthermore, LG appears to have forgotten that this Court has before it a motion for a new trial filed by LG, not Mondis.

statute says:

Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

35 U.S.C. § 284. Mondis points out, correctly, that the wording of this provision is mandatory, not discretionary: “the court *shall* award.” As the discussion that follows will show, the Federal Circuit has limited this mandate to a damages award that is reasonably supported by the evidence at trial.

In support of this argument, Mondis points to the Federal Circuit’s decision in Dow Chemical, in which it held:

The statute is unequivocal that the district court must award damages in an amount no less than a reasonable royalty. Further, section 284 is clear that expert testimony is not necessary to the award of damages, but rather “*may* [be] received . . . as an aid.” 35 U.S.C. § 284 (2000) (emphasis added).

The district court’s conclusion that no damages could be awarded, in light of the presumption of damages when infringement is proven, was in error. But, the district court’s obligation to award some amount of damages does not mean that a patentee who puts on little or no satisfactory evidence of a reasonable royalty can successfully appeal on the ground that the amount awarded by the court is not ‘reasonable’ and therefore contravenes section 284. Should Dow prove infringement of claims 23 and 24 the district court should consider the so-called *Georgia-Pacific* factors in detail, and award such reasonable royalties as the record evidence will support.

Dow Chem. Co. v. Mee Indus., 341 F.3d 1370, 1381-82 (Fed. Cir. 2003) (citations omitted.)

This indeed supports Mondis’ position. In Dow, the Federal Circuit made clear three key points. First, after a patentee has proven infringement, § 284 gives rise to a presumption of entitlement to an award of damages. Second, the absence of admissible expert testimony in support of a damages theory does not alter this presumption. Third, under such circumstances, the trial court

must apply the Georgia-Pacific analysis and award such reasonable royalties as the record evidence will support.

This is not a case in which the exclusion of Bratic's testimony, advancing a legally invalid damages theory, leaves Mondis with no evidence of damages. To the contrary, at trial, Mondis presented a great deal of relevant evidence, particularly the past licensing agreements and the Innolux verdict. The record evidence without Bratic's testimony was sufficient to allow a reasonable jury to award reasonable royalties. Moreover, LG's expert, Mr. Hansen, testified that Mondis was entitled to an award of \$1.9 million in damages. As Mondis argues, this in itself provides a basis in evidence to calculate a reasonable royalty.

Mondis argues, persuasively, that, under Federal Circuit law, defects in a patentee's damages case do not mandate an award of zero damages, and that the proper remedy for material and prejudicial defects at trial that require a verdict to be vacated is a new trial without those defects.<sup>4</sup> Mondis also cites the Federal Circuit's decision in Apple, where it held:

The district court agreed and concluded that Apple was not entitled to any measure of damages because Apple had failed to show that its measure of damages was correct. We disagree and hold that a finding that a royalty estimate may suffer from factual flaws does not, by itself, support the legal conclusion that zero is a reasonable royalty.

Due to the procedural posture in this case, we must assume that the patents at issue are valid and infringed. With infringement assumed, the statute requires the court to award damages "in no event less than a reasonable royalty." 35 U.S.C. § 284. Because no less than a reasonable royalty is required, the fact finder must determine what royalty is supported by the record.

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<sup>4</sup> LG cites the pre-Federal Circuit decision by the Third Circuit in Devex, but the Devex Court took the same position: "In the absence of any evidence as to what would constitute a reasonable royalty in a given case, a fact finder would have no means of arriving at a reasonable royalty, and none could be awarded." Devex Corp. v. GMC, 667 F.2d 347, 361 (3d Cir. 1981). The Devex Court held that an award of zero damages is appropriate when there is no evidence to support damages, not when a patentee's case has legal defects. Id.

If a patentee's evidence fails to support its specific royalty estimate, the fact finder is still required to determine what royalty is supported by the record. Indeed, if the record evidence does not fully support either party's royalty estimate, the fact finder must still determine what constitutes a reasonable royalty from the record evidence. Certainly, if the patentee's proof is weak, the court is free to award a low, perhaps nominal, royalty, as long as that royalty is supported by the record.

Thus, a fact finder may award no damages only when the record supports a zero royalty award. For example, in a case completely lacking any evidence on which to base a damages award, the record may well support a zero royalty award.

Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1327-28 (Fed. Cir. 2014) (citations omitted).

Mondis argues, persuasively, that this confirms that the trial court has an obligation to award damages in whatever amount is supported by the evidence of record. Furthermore, an award of zero damages is appropriate only when the record supports it. The evidentiary record at trial does not support an award of zero damages. Apple also supports Mondis' position that the proper remedy here is a new trial. See also Info-Hold, Inc. v. Muzak LLC, 783 F.3d 1365, 1372 (Fed. Cir. 2015) ("a patentee's failure to show that its royalty estimate is correct is insufficient grounds for awarding a royalty of zero.")

Another apposite Federal Circuit case is Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc., 904 F.3d 965, 980 (Fed. Cir. 2018). In Power, in short, the Federal Circuit found that the patentee's damages evidence at trial was insufficient as a matter of law to support the jury's damages award – just as this Court has found in the instant case. Id. The Federal Circuit held that the proper remedy was a new trial: "Because the evidence presented by Power Integrations was insufficient as a matter of law to invoke the entire market value rule, we vacate the award of damages and remand for a new trial." Id. This Court having determined that the patentee's damages evidence at trial was insufficient as a matter of law to support the jury's

damages award, and having vacated the award of damages, the proper remedy is a new trial.

There is one subsequent Federal Circuit decision that cites Promega on these issues. In Finjan, the Federal Circuit held:

While it is clear that Finjan failed to present a damages case that can support the jury's verdict, reversal of JMOL could result in a situation in which Finjan receives no compensation for Blue Coat's infringement of the '844 patent. Ordinarily, the district court must award damages in an amount no less than a reasonable royalty when infringement is found, unless the patent holder has waived the right to damages based on alternate theories, *Promega Corp. v. Life Tech. Corp.*, 875 F.3d 651, 660 (Fed. Cir. 2017). We therefore remand to the district court to determine whether Finjan has waived the right to establish reasonable royalty damages under a new theory and whether to order a new trial on damages.

Finjan, Inc. v. Blue Coat Sys., 879 F.3d 1299, 1312 (Fed. Cir. 2018) (citations omitted). This supports Mondis' argument that defects in a patentee's damages case should not foreclose an award of damages, unless the patentee has waived the right to establish damages under a new theory. It also supports the position that proof of infringement gives rise to a presumption of entitlement to an award of damages. A new trial is the appropriate remedy in this case.

LG's motion sought, in the alternative, remittitur of the damages award. The Court concludes that a new trial is the better remedy. Were the Court to decide to grant the motion for remittitur, it would be required to apply the maximum recovery rule. Shockley v. Arcan, 248 F.3d 1349, 1362 (Fed. Cir. 2001). This would require a course of briefing, reweighing the evidence at trial, making factual determinations, and calculation of the maximum damages award supported by the evidence. Plaintiff would then have the right to decline the award and obtain a new trial. Id. Mondis has made clear that, at this juncture, it seeks a new trial. There is no advantage to anyone to litigate the damages award in post-trial proceedings, only to have Mondis then assert its right to decline the award and obtain a new trial. It is a far more efficient use of

everyone's resources to proceed directly to a new trial.

This Court grants LG's motion for a new trial, subject to the following limitations. At the new trial, the parties may not offer evidence that was not presented at the previous trial, with one potential exception: should Mondis seek to offer the expert testimony of Mr. Bratic, based solely on the evidence presented at the previous trial, Mondis may submit an updated expert report, which this Court will consider in a Daubert hearing. All expert testimony must reflect the Federal Circuit law on apportionment, as discussed in the Court's Opinion in which it vacated the jury damages verdict.

For these reasons,

**IT IS** on this 22nd day of April, 2020

**ORDERED** that LG's motion for judgment as a matter of law under Rule 50(b), a new trial under Rule 59, and/or remittitur regarding damages and willfulness (Docket Entry No. 489) is **GRANTED** in part and **DENIED** in part; and it is further

**ORDERED** that LG's motion for judgment as a matter of law and/or remittitur is **DENIED**; and it is further

**ORDERED** that LG's motion for a new trial is **GRANTED**.

s/ Stanley R. Chesler  
Stanley R. Chesler, U.S.D.J.

**UNITED STATES DISTRICT COURT  
DISTRICT OF NEW JERSEY**

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MONDIS TECHNOLOGY LTD. et al.,

Plaintiffs,

v.

LG ELECTRONICS, INC.  
et al.,

Defendants.

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Civil Action No. 15-4431 (SRC)

**OPINION & ORDER**

**CHESLER, U.S.D.J.**

This matter comes before the Court on the motion to strike by LG Electronics, Inc. and LG Electronics U.S.A., Inc. (collectively, “LG”). Plaintiffs Hitachi Maxell, Ltd., n/k/a Maxell Holdings, Ltd., Maxell, Ltd., and Mondis Technology Ltd. (collectively, “Mondis”) oppose the motion. LG asks the Court to strike the supplemental expert report of Mr. Lamm, as well as:

(2) any opinions in Mr. Bratic’s new damages expert report that rely on Mr. Lamm’s new report; and (3) any remaining new damages theories in Mr. Bratic’s new report.

(Defs.’ Br. 23.) The net effect of these two requests, LG contends, is to strike Mr. Bratic’s supplementary report in its entirety.

The parties do not dispute that submission of Mr. Lamm’s supplementary report has not been authorized by this Court, and Mondis seeks leave of the Court to allow it. Mondis, however, makes not even a colorable argument in favor of granting this request. On April 22, 2020, this Court issued an Opinion and Order which stated:

This Court grants LG’s motion for a new trial, subject to the following limitations. At the new trial, the parties may not offer evidence that was not

presented at the previous trial, with one potential exception: should Mondis seek to offer the expert testimony of Mr. Bratic, based solely on the evidence presented at the previous trial, Mondis may submit an updated expert report, which this Court will consider in a Daubert hearing.

(Opinion & Order of April 22, 2020 at 9.) Mr. Lamm's supplementary report violates this Order and the motion to strike that supplementary report will be granted.

As to Mr. Bratic's supplementary report, LG moves to strike parts of the report on two grounds: 1) some parts rely on Mr. Lamm's unauthorized supplementary report; and 2) some parts contain new theories. To the extent that Mr. Bratic's supplementary report contains opinions that rely, even in part, on Mr. Lamm's unauthorized supplementary report, the motion to strike those opinions is granted, as they are in clear violation of this Court's Order.

LG's second argument concerns alleged new theories in Mr. Bratic's supplementary report. LG cites this Court's Opinion and Order filed June 11, 2020, which stated:

The Court has limited supplementary discovery to a very narrow scope, and will not allow a new theory of damages to be presented at the re-trial. No new evidence may be presented at the re-trial, with the possible exception of updated expert testimony.

(Opinion & Order of June 11, 2020 at 5.) LG argues that Mr. Bratic's supplementary report contains many opinions which constitute "a new theory of damages" and therefore violate this Order. The Court concludes that LG has advanced an overbroad interpretation of "a new theory of damages." The Court did not intend the narrowly limiting effect that LG's interpretation would produce. The Court did not intend to simultaneously reject the threshold theory while barring everything that was not the threshold theory at re-trial. Mr. Bratic may express expert opinions about reasonable royalties to the extent that such opinions are based on the existing trial record *only*. Such expert opinions will not be barred.

The Court recognizes, however, that the parties are sure to have differing opinions about



how to apply these rulings to Mr. Bratic's supplementary report. To assist the Court in making a ruling that provides clarity, Mondis shall submit supplementary briefing, with certifications, as needed, which precisely document the supporting evidentiary basis of every element of Mr. Bratic's proposed expert opinions in the trial record. LG shall submit a responsive brief. The Court will then determine what parts, if any, of Mr. Bratic's supplementary report it will strike.

For these reasons,

**IT IS** on this 15<sup>th</sup> day of July, 2020

**ORDERED** that LG's motion to strike (Docket Entry No. 634) is **GRANTED** in part and decision is **RESERVED** in part; and it is further

**ORDERED** that, as to Mr. Lamm's supplementary report, the motion to strike is **GRANTED**, and the Court **STRIKES** that report from the record; and it is further

**ORDERED** that, as to Mr. Bratic's supplementary report, decision on the motion to strike is **RESERVED** pending supplementary briefing; and it is further

**ORDERED** that, within two weeks of the date of entry of this Order, Mondis shall submit the supplementary briefing described above; and it is further

**ORDERED** that, within two weeks of the filing of Plaintiff's supplementary briefing, LG shall submit a responsive brief.

s/ Stanley R. Chesler  
Stanley R. Chesler, U.S.D.J.

## Appx267

The Court has received the letter from Plaintiff Mondis Technology Ltd., dated August 17, 2020, seeking clarification of this Court's Order entered on that date. To make it perfectly explicit, the Court has not invited Mondis to submit any revised supplementary expert report from Mr. Bratic. In the first Order issued on July 16, 2020, all the Court wanted was for Mondis to delete those portions of Mr. Bratic's supplementary report<sup>1</sup>, as it existed in the record on that date, that relied on Mr. Lamm's unauthorized supplementary report. Also, if Mondis believes that any portions of the Bratic Supplement are not supported by the evidence presented at trial, Mondis may delete those portions. Mondis should then follow the instructions contained in the Order of July 16, 2020.

Appx268

In short, this Court has not given Mondis leave to add or change *any* of the opinions in the Bratic Supplement; all it may do is delete or abandon portions.

**SO ORDERED.**

s/ Stanley R. Chesler  
Stanley R. Chesler, U.S.D.J.

Dated: August 18, 2020

**UNITED STATES DISTRICT COURT  
DISTRICT OF NEW JERSEY**

MONDIS TECHNOLOGY LTD. et al.,

Plaintiffs,

V.

LG ELECTRONICS, INC.  
et al.,

Defendants.

Civil Action No. 15-4431 (SRC)

## OPINION & ORDER

**CHESLER, U.S.D.J.**

This matter comes before the Court on the motion to strike the Bratic Supplement by LG Electronics, Inc. and LG Electronics U.S.A., Inc. (collectively, “LG”).<sup>1</sup> Plaintiffs Hitachi Maxell, Ltd., n/k/a Maxell Holdings, Ltd., Maxell, Ltd., and Mondis Technology Ltd. (collectively, “Mondis”) oppose the motion. In the Opinion and Order dated July 15, 2020 (“the Strike Opinion”), the Court granted in part and reserved decision in part on this motion, pending supplementary briefing. In today’s decision, this Court continues its consideration of this motion to strike.

The Court begins with a careful account of the history of the present motion. This is particularly important in considering this motion, because the Mondis supplementary brief appears significantly out of touch with that history. Mondis expressly seeks leave to revise the

<sup>1</sup> In its motion to strike, LG filed as an exhibit the “Supplemental Expert Report of Walter Bratic,” dated June 19, 2020. (Docket Entry No. 635, Ex. B, hereinafter, the “Bratic Supplement.”)

Bratic Supplement, but also tacitly seems to try to revise the history of this case. Specifically, Mondis tries to erase its submission of the intertwined Bratic and Lamm supplemental reports, and the Court's partial grant of LG's motion to strike which followed.

In the motion to strike, LG asked the Court to strike the supplemental expert report of Mr. Lamm (the "Lamm Supplement"), as well as:

(2) any opinions in Mr. Bratic's new damages expert report that rely on Mr. Lamm's new report; and (3) any remaining new damages theories in Mr. Bratic's new report.

(Defs.' Br. 23.) In considering this motion, this Court noted that, on April 22, 2020, this Court issued an Opinion and Order which stated:

This Court grants LG's motion for a new trial, subject to the following limitations. At the new trial, the parties may not offer evidence that was not presented at the previous trial, with one potential exception: should Mondis seek to offer the expert testimony of Mr. Bratic, based solely on the evidence presented at the previous trial, Mondis may submit an updated expert report, which this Court will consider in a Daubert hearing.

(Opinion & Order of April 22, 2020 at 9.) In the Strike Opinion, this Court held that the Lamm Supplement, submitted by Mondis, violated the Order of April 22, 2020, and granted LG's motion to strike that supplementary report. (Strike Opinion at 2.)

As to the Bratic Supplement, LG had moved to strike parts of the report on two grounds: 1) some parts relied on Mr. Lamm's unauthorized supplementary report; and 2) some parts contain new theories. In the Strike Opinion, this Court held: "To the extent that Mr. Bratic's supplementary report contains opinions that rely, even in part, on Mr. Lamm's unauthorized supplementary report, the motion to strike those opinions is granted, as they are in clear violation of this Court's Order." (Strike Opinion at 2.) This Court also held: "Mr. Bratic may express expert opinions about reasonable royalties to the extent that such opinions are based on the

existing trial record *only*.” (Id.) This Court recognized, however, that the parties were likely to differ about the application of these rulings to the Bratic Supplement, and it Ordered supplementary briefing “[t]o assist the Court in making a ruling that provides clarity.” (Id. at 3.) The Court directed Mondis to “submit supplementary briefing, with certifications, as needed, which precisely document the supporting evidentiary basis of every element of Mr. Bratic’s proposed expert opinions in the trial record,” with LG to submit a responsive brief. (Id.) This Court stated: “The Court will then determine what parts, if any, of Mr. Bratic’s supplementary report it will strike.” (Id.)

Two rounds of supplementary briefing followed. In each round, Mondis asked this Court to accept a revised Bratic Supplement. The Court rejected the first round of supplementary briefing,<sup>2</sup> explaining that Mondis had not focused on the Bratic Supplement, and the Court directed the parties to rebrief. Mondis asked for clarification, and this Court issued the Order dated August 18, 2020, which stated:

In the first Order issued on July 16, 2020, all the Court wanted was for Mondis to delete those portions of Mr. Bratic’s supplementary report , as it existed in the record on that date, that relied on Mr. Lamm’s unauthorized supplementary report. Also, if Mondis believes that any portions of the Bratic Supplement are not supported by the evidence presented at trial, Mondis may delete those portions.

(Order of August 18, 2020 at 1.) The Court now has a second round of supplementary briefs and another proposed revised Bratic report from Mondis.

The Court denies the requests from Mondis to admit a revised version of the Bratic

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<sup>2</sup> The Court having rejected the first round of supplementary briefing in its entirety, all of the references to supplementary briefs in this Opinion refer to the second set of briefs, except as otherwise noted.

Supplement. The Court, in its Order of August 18, 2020, permitted Mondis to submit a version of the Bratic Supplement solely as a demonstrative exhibit to illustrate those parts of the Bratic Supplement that, in view of the Strike Opinion, it now chooses to abandon. When this Court granted the motion for a new trial, this Court stated: “Mondis may submit an updated expert report.” (Opinion & Order of April 22, 2020 at 9 (emphasis added).)

This Court did give Mondis the opportunity to submit an updated expert report – but the Court has not given Mondis leave to further revise the report it submitted. Mondis submitted the updated expert report that appears in the record as Exhibit B of Docket Entry No. 635. The alternate versions that Mondis filed on August 28, 2020 are recognized only as exhibits demonstrating what parts of the Bratic Supplement Mondis proposes to abandon. The record contains only one Bratic Supplement.

This is a crucial point. In its supplementary brief, Mondis skips over the fact that this Court already granted the motion to strike those parts of the Bratic Supplement that rely on the Lamm Supplement, even in part. Mondis argues as if the fact that the Bratic Supplement relied on the Lamm Supplement was something that can be erased or undone; it is not. Mondis has not objected that the document filed by LG as Exhibit B is not a correct copy of the updated Bratic expert report that Mondis transmitted to LG. This Court does not intend its consideration of the Bratic Supplement to be an iterative process in which Mondis has multiple opportunities to further revise the Bratic Supplement based on the Court’s feedback. Mondis cannot undo what was already done: the Bratic Supplement contains opinions that rely on the Lamm Supplement, and the motion to strike those opinions was granted months ago. As to the issue of the Bratic Supplement’s reliance on the Lamm Supplement, all that presently remains is to precisely define



the set of such opinions.

The Mondis supplementary brief begins by mischaracterizing the relevant history: “In its orders . . . , the Court ruled that the Bratic supplemental report would be admitted to the extent that its evidentiary basis lay in the pre-existing trial record.” (Pl.’s Supp. Br. at 1.) This is substantially inaccurate, on two grounds. First, in fact, this Court ruled that the Bratic Supplement would be *considered* for admission, not that it would be guaranteed admission. (Opinion & Order of April 22, 2020 at 9.) Second, the quote from the Mondis brief omits a material condition. This Court has ruled that the Bratic Supplement will be considered, to the extent that two preliminary conditions are satisfied: 1) it does not rely, even in part, on the Lamm Supplement; **and** 2) it does not rely on evidence which is not in the pre-existing trial record.

The Court has already granted-in-part the motion to strike the Bratic Supplement. The Court presently has two remaining questions before it: 1) what parts of the Bratic Supplement will the Court strike because they contain opinions that rely, even in part, on Mr. Lamm’s unauthorized supplementary report; and 2) what parts of the Bratic Supplement will the Court strike because they contain opinions that are based on evidence that was not presented at the previous trial?

**I. What parts of the Bratic Supplement will the Court strike because they contain opinions that rely, even in part, on Mr. Lamm’s unauthorized supplementary report?**

As just discussed, despite this Court’s Orders, Mondis submitted a supplementary brief that overlooked this question and did not address it.

The Bratic Supplement cited the Lamm Supplement in the following paragraphs: 11, 12, 16, 22(b), 22(g), and 49. The Court strikes in their entirety paragraphs 11, 12, 16, 22(b), and

22(g), because they contain opinions that expressly rely on the Lamm Supplement. Paragraph 49, however, contains only a *de minimis* reference which states: “see also” the Lamm Supplement. Because paragraph 49 does not contain any opinion that relies on the Lamm Supplement, the Court strikes only the reference to the Lamm Supplement in paragraph 49.

The next question is: what parts of the Bratic Supplement rely on the Lamm Supplement but do not contain any express citation to the Lamm Supplement? This Court finds that every reference to the approach which Mondis terms “Alessi Apportionment,” relying on the proposition that the ‘180 patent holds the value of 82.4% of the ‘090 patent family, as expressed in Bratic Supplement ¶ 22(g), relies in part on the Lamm Supplement. The following paragraphs cite ¶ 22(g): 27, 35, and footnote 24. The Court strikes paragraphs 27 and 35 as well as footnote 24, because they rely in part on the Lamm Supplement.

The Bratic Supplement contains paragraphs that do not expressly cite either the Lamm Supplement or ¶ 22(g), but nonetheless describe royalty models, or aspects of royalty models, that rely in part on the concept of Alessi Apportionment. Mondis’ brief contains a section, on pages fourteen through eighteen, which attempts to justify Alessi Apportionment without referring to the Lamm Supplement. Mondis’ argument appears to be that, if it can now imagine a method that Bratic *might* have used to derive the 82.4% without the Lamm Supplement, this Court should not strike it.

Mondis offers nothing to justify this exercise in using imagination to revise history; it is unauthorized by this Court. Mondis summarizes the elements of this fantasy calculation of 82.4% and states: “This calculation is not based upon any matter in Mr. Lamm’s stricken supplemental report.” (Pls.’ Supp. Br. 15.) The calculation referred to, however, is a fantasy

calculation; it is not the calculation of 82.4% that Bratic described in paragraph 22 of the Bratic Supplement, which expressly relied on the Lamm Supplement. Instead, it is an imaginary, alternative calculation. Mondis further asserts:

In the original report, he cross-referenced the identical calculation in Lamm II, the reference to which has now been removed. There is no basis for striking the calculation simply because Mr. Lamm repeated it.

(Pls.' Supp. Br. 17.) This is a revisionist fantasy about history: Mondis now casts Bratic's use of the Lamm Supplement as a mere "cross-reference" and – remarkably – states that "Mr. Lamm repeated it."<sup>3</sup> In this alternate reality, Mondis suggests that – never mind what Bratic actually wrote – Bratic originated Alessi Apportionment and Lamm just repeated it. Thus, Mondis proposes not only to revise the Bratic Supplement, but to revise history itself and make Bratic the independent originator of the Alessi Apportionment calculations.

The Court is not persuaded, for three principle reasons.

A. On Alessi Apportionment: Reason 1

First, the revisionist fantasy is contradicted by the plain language of the Bratic Supplement. The first paragraph of the Bratic Supplement states: "In forming my opinions in this report, I have reviewed and relied on the Supplemental Expert Report of Joseph Lamm dated June 18, 2020 (the 'Lamm Supplemental Report')." This pulls the rug out from under the entire Mondis revisionist effort. The first supplemental brief filed by Mondis, now rejected by the Court, claimed: "The proposed Lamm supplement was expository rather than essential, and removing it has no material impact on the proposed Bratic supplement." (Docket Entry No. 649

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<sup>3</sup> Never mind that the Lamm Supplement is dated one day *before* the Bratic Supplement and that Bratic wrote that he relied on the Lamm Supplement.

at 2.) This statement is contradicted by Bratic’s statement of reliance; both cannot be true. The Court credits the contemporaneous statement by Bratic that he relied on the Lamm Supplement and does not credit Plaintiffs’ revisionist fantasy, which was imagined after the Court’s decision to strike all parts of the Bratic Supplement that relied, even in part, on the Lamm Supplement.

Furthermore, Plaintiffs’ opposition brief to LG’s motion to strike makes plain that Mondis’ subsequent contention that Bratic’s use of the Lamm Supplement was merely as a “cross-reference” is a revisionist fantasy. In that opposition brief, Mondis wrote:

Mr. Lamm’s supplemental opinion in paragraph 5 that the ‘090 and ‘342 patents have value that comes into play when the display is connected to a computer is a new opinion. . . .

With respect to paragraph 6, . . . to the extent anything about Mr. Lamm’s opinion is new, it is concise and solely offered to address the court’s concerns about apportionment.

Mr. Lamm’s quantitative calculation of the relative values of the three patents in paragraph 7 was not presented at the earlier trial . . .

In sum, Mr. Lamm’s supplemental report contains an opinion on the relative quantitative value of the three patents in the Innolux verdict – the ‘180 patent-in-suit, and the ‘342 and ‘090 patents . . .

Both Mr. Lamm and Mr. Bratic observed that the ‘180 patent had more value to televisions, which are typically connected to STBs and similar video sources, but only occasionally to computers. . . .

What Bratic could not do is explain why. That is a technical question within Lamm’s expertise.

(Docket Entry No. 639 at 31-33.) With these statements – made by Mondis *before* this Court granted-in-part the motion to strike – Mondis conceded that: 1) in the Lamm Supplement, Lamm stated new opinions on the relative quantitative value of the three patents in the Innolux verdict; and 2) Bratic relied on Lamm’s technical expertise to support an inference about the relative

value of the ‘180 patent for televisions. Bratic needed Lamm’s expertise to provide a basis for his inferences about the relative technical value of the patents in the ‘090 family.

These concessions are swept under the rug in Plaintiffs’ latest supplemental brief, which imagines the history quite differently, as if Bratic simply read Alessi’s trial testimony and did some easy calculations with the numbers. Now, Mondis has deleted any reference to Bratic’s reliance on Lamm’s new opinions for his inferences about the relative value of the three patents in the Innolux verdict.

#### B. On Alessi Apportionment: Reason 2

Second, the proposed revision of history is contradicted by the details of the Alessi Apportionment analysis, as stated in paragraph 22 of the Bratic Supplement. The Bratic Supplement describes the following analysis. Bratic first points to the fact, in evidence at trial, that the Innolux jury awarded damages in the amount of .75% for televisions that infringed three patents, the ‘180, ‘090 and ‘342 patents. (Bratic Supplement at ¶ 22(a).) Applying Hansen’s patent counting approach, each patent has an equal value of .25% in the verdict. (*Id.*)

The next paragraph, 22(b), plays a crucial role in the analysis: it is here that Bratic relies on the Lamm Supplement for the proposition that the technology covered by the ‘090 and ‘342 patents has little value when use in televisions is considered. The paragraph, in relevant part, states:

By contrast, the principal value of the ‘090 and ‘342 patents pertained to computer monitors, not TVs. According to Mr. Lamm, the ‘090 patent was important to computer monitors because monitors are typically connected to computers, such as those running Microsoft Windows operating systems, which makes limited use of the EDID serial number to recognize the monitor and restore persisted display settings. Lamm Supplemental Report, ¶¶ 3, 5, and 6. Similarly, the ‘342 patent was significantly more important for computer monitors since such monitors are again likely to be connected to computers running a Microsoft

operating system that is able to make limited use of the product ID code to recognize the model of monitor and to load appropriate drivers. Lamm Supplemental Report, ¶¶ 3, 5, and 6. Thus, both the '090 and '342 patents provided substantial value for computer monitors, but provided little value for TVs because TVs are connected to computers with far less frequency than are computer monitors.

(Bratic Supplement at ¶ 22(b).) The quoted text relies on the Lamm Supplement to provide the technical basis to support the proposition that the technologies disclosed in the '090 and '342 patents have little value for use in televisions.

Paragraph 22(b) cites only the Lamm Supplement. It contains no citations to any evidence from trial. Therefore, paragraph 22(b) relies only on the Lamm Supplement and does not rely on evidence presented at trial. The key question, then, is: is paragraph 22(b) superfluous? Does the Alessi Apportionment theory, as stated in the Bratic Supplement, rely on paragraph 22(b)? If the Alessi Apportionment theory has adequate support from the evidence at trial, without paragraph 22(b), then Mondis may be correct.

Paragraph 22(c) cites the Alessi testimony about the data from the marketing study of flat panel televisions. This paragraph cites two pieces of evidence: 1) exhibit MON-2936; and 2) the following trial testimony:

Q. LG has done some studies in which it has asked consumers how often they connect their televisions to different types of devices. Correct?

A. Yes, we have.

Q. And those studies showed that in living rooms, eight percent of the customers reported having connected their television to a computer. Correct?

A. Yes, that's my recollection.

Q. And in great rooms, the number was ten percent. Correct?

A. I believe that's true.

Q. And if one thinks an Xbox or a set-top box is a computer, then basically close to a hundred percent of your televisions are going to be connected to a computer. Isn't that right?

A. I can't agree with that.

Q. What percentage of your televisions are connected to digital set-top boxes,

approximately?

A. I believe it was somewhere in the high 70s to 80 percent.

Q. And do you recall what percentage are connected to gaming devices like the Xbox?

A. I don't remember the number specifically but it would have been probably less than the set-top box, but a reasonably large amount.

(Tr. 737:9-738:8.) In the first round of supplementary briefing, LG objected to the citation to exhibit MON-2936 on the ground that it was not formally admitted into evidence at trial and, in response, Mondis deleted the reference. (Pls.' Supp. Br. at 18 n.5.) This leaves paragraph 22(c) relying only on the Alessi testimony quoted above.

The next three paragraphs, 22(d-f), contain the heart of the Alessi Apportionment analysis:

(d) Based on this information, it is possible to calculate the relative values of the '180, '090, and '342 patents based on how often these inventions were used by TVs when connected to various video sources. Assuming the mid-point of Mr. Alessi's usage ranges, 75% ( $= 70\% + 80\% / 2$ ) of TVs were connected at least to a STB, which could implement PnP technology and used the '180 patent; and 9% ( $= 8\% + 10\% / 2$ ) of TVs were connected to a computer which could also implement PnP technology and used the invention of the '180 patent. Therefore, out of every 100 TVs, there were approximately 84 instances of use of the invention of the '180 patent.

(e) By the same token, for every 100 TVs, on average there were 9 instances in which a connected video source would be a computer that could make use of a stored serial number that practiced the '090 patent. Since out of 100 TVs there would be 84 instances of use of the '180 patent and only up to 9 instances of use of the '090 patent, the relative value of the '090 patent would be 10.7% ( $= 9/84$ ).

(f) Similarly, the 9% of TVs connected to a computer could also make use of the product ID information in the EDID to locate and load drivers for the display. Thus, for every 100 TVs, on average 9 of them could implement the '342 patent when the connected video source was a computer. As a result, the relative value of the '342 patent would be 10.7% of the relative value of the '180 patent ( $9/84$ ).

(Bratic Supplement at ¶ 22(d-f).) The key question is: do these paragraphs have an adequate foundation if paragraph 22(b) is deleted? Do these paragraphs have adequate support in the

evidence presented at trial alone?

Two different approaches to answering these questions produce the same answer: no, they do not have adequate support in the evidence presented at trial alone. First, consider this simply as a textual question. The Alessi testimony quoted above says nothing about patents – not one word. The testimony describes only study findings about percentages of use of televisions with various devices. Paragraph 22(d), on the other hand, links these findings to inferences about patent use: “STB, which could implement PnP technology and used the ‘180 patent” and “computer which could also implement PnP technology and used the invention of the ‘180 patent.” What is the evidentiary support for this linking of particular device types to particular patents? It is paragraph 22(b), which relies on the Lamm Supplement. If paragraph 22(b) is removed, the inferences stated in paragraph 22(d) lack a foundation in the evidence at trial. Bratic cited no other basis for linking the devices in the Alessi testimony to particular patents.

Second, consider the substance of Bratic’s theory of Alessi Apportionment. As noted, the Alessi testimony described study findings about percentages of use of televisions with various devices: set-top boxes, gaming devices, and computers. In paragraph 22, Bratic does not make use of the data about gaming devices. Bratic categorizes connections between a television and a set-top box as having “used the ‘180 patent,” and a connection between a television and computers as having “used the invention of the ‘180 patent.” (Bratic Supplement at ¶ 22(d).) Paragraph 22(e) categorizes connections between a television and a computer as also having “practiced the ‘090 patent.” (*Id.* at ¶ 22(e).) Paragraph 22(f) categorizes connections between a television and a computer as also being able to “implement the ‘342



patent.” (Id. at ¶ 22(f).) Last, paragraph 22(g) puts the three paragraphs together, finding that 82.4% of the connections would have practiced the ‘180 patent, while 8.8% of the connections would have practiced each of the ‘090 and ‘342 patents. (Id. at ¶ 22(g).)

Again, the key question is: what is the evidentiary basis for the propositions which are used to link survey results about particular devices to particular patents? As already established, that is set forth in paragraph 22(b). Delete paragraph 22(b), and the Alessi Apportionment theory loses an essential element. This Court concludes that the Alessi Apportionment theory in the Bratic Supplement relies on the Lamm Supplement. The Alessi Apportionment theory does not have an evidentiary foundation solely in the evidence at trial.

### C. On Alessi Apportionment: Reason 3

The third reason to strike the Alessi Apportionment theory is the law of the case. This Court already granted-in-part the motion to strike and struck the parts of the Bratic Supplement which state “opinions that rely, even in part, on Mr. Lamm’s unauthorized supplementary report.” (Strike Opinion at 2.) Paragraph 22 of the Bratic Supplement, which derives the 82.4% calculation, cites the Lamm Supplement and expressly relies on it. Mondis did not move for reconsideration of that decision, and it is now the law of the case. If Mondis truly believed that this Court had misinterpreted the relationship between the Bratic Supplement and the Lamm Supplement in its decision to grant in part the motion to strike, it might have moved for reconsideration, but it did not do so. Instead, Mondis has now twice attempted to revise the Bratic Supplement to excise the Lamm Supplement. If the Bratic Supplement truly independently originated the 82.4% calculation, and Lamm merely repeated it, why was such revision even necessary? Would it not have been simpler to just move for reconsideration on

the ground that the Court had misread Bratic, if indeed it had? The decision to grant the motion to strike those parts of the Bratic Supplement that rely on the Lamm Supplement was made by this Court months ago. Today's decision simply determines that paragraph 22, and others, rely on the Lamm Supplement.

This Court thus grants the motion to strike with regard to every mention of the Alessi Apportionment theory in the Bratic Supplement. The Court strikes paragraphs 22, 27, and 35, as well as footnote 24.

**II. What parts of the Bratic Supplement will the Court strike because they contain opinions that are based on evidence that was not presented at the previous trial?**

The Court has addressed the first of the two questions before it, and turns to the second. The Court now examines the Bratic Supplement to determine whether any parts contain opinions that are based on evidence that was not presented at the previous trial.

In paragraph 6, Mondis has offered to change “The other patents” to “Other patents.” This improves accuracy, and that change will be made. Paragraph 11 has already been struck.

As to the two theories in the Bratic Supplement based on the Hon Hai license, LG contends that an element of both theories is the average sales price (“ASP”) of Hon Hai televisions, \$280, which was not in evidence at trial. In Bratic Supplement paragraph 26(c), Bratic adjusts the Hon Hai royalty rate of \$.70 by multiplying by the ratio of the LG television ASP to the Hon Hai Television ASP. Mondis does not point to anywhere in the trial that the \$280 ASP of Hon Hai televisions was entered into evidence. Instead, Mondis calls it “trivial” to calculate the \$280 ASP from evidence of record, and urges: “Surely, Mr. Bratic can be permitted to do that elementary calculation.” (Pls.’ Supp. Br. at 22.)

While the Court does not doubt that an elementary calculation can generate the \$280

ASP, the problem for Mondis, here, is the push to literally revise history: there would have been no issue had, in fact, Bratic done the allegedly elementary calculation and put it in his updated report before he submitted it, but he did not do so. Mondis submitted Bratic's updated report, but now feels it should be permitted to further revise it. This Court has made clear that the Bratic Supplement was submitted once and once only; it will not be amended or revised.

Mondis also argues that the Hon Hai analysis could have been done without any use of the \$280 ASP whatever, to which the Court gives the same response: perhaps it could have been done that way, but it wasn't. The Bratic Supplement will not be revised.

The ASP of Hon Hai televisions was not in evidence at trial. Bratic's analysis based on the Hon Hai license contains an element that relies on evidence not in the trial record. The Court strikes paragraph 26(c), as well as the paragraphs which rely on that paragraph, 26(d), 27, and 28.

Next, LG argues that two of Bratic's theories contain an adjustment derived from the now-vacated jury award itself. In paragraphs 27 and 36, Bratic applies an 80% uplift that he attributes to an alleged observation by the Court, made in the decision to vacate the jury award. This is in no way evidence presented at trial. It is a comment by the Court in an Opinion, and it was characterized by the Court as speculation about the question of how the jury came up with its damages award. The Court's speculative comments in *dicta* after trial – about a jury verdict that the Court vacated – are not evidence at trial. The Court strikes paragraphs 27 and 36 because they present analysis based on evidence that is not in the trial record.

LG next argues that three of Bratic's damages theories rely on the Innolux jury verdict, which is not in the trial record. The parties dispute the effect of this Court's *in limine* rulings on

the admission of the Innolux jury verdict, but this Court need not reach that dispute. There is no real dispute that, in fact, the jury at trial heard testimony that the Innolux jury reached a verdict that the Innolux televisions infringed three patents, the '090, '342 and '180 patents, and awarded damages based on a royalty rate of .75%. LG concedes that Mr. Spiro stated this in his testimony. (Def.'s Supp. Br. 26-27.) As to Bratic's statements based on the Innolux verdict royalty rate of .75%, for infringement of those three patents, the motion to strike will be denied.

LG asks that, should the Court deny the motion to strike the theories which rely on these facts about the Innolux verdict, it be allowed to supplement the record. This should be the subject of a formal motion.

LG also argues that Bratic makes an improper assertion that the Innolux jury award contained a tripling uplift related to the uncertainty discount. The Court need not reach this issue because it is moot: the Court has already granted the motion to strike the paragraphs at issue, 26(d), 27, and 28. As to this issue, the motion to strike will be denied as moot.

In three theories in the Bratic Supplement, Bratic uses an element which is the Innolux verdict royalty rate divided by 3, based on the evidence that the Innolux jury verdict awarded a royalty for the infringement of three patents. LG argues that this is improper, but not on the ground that it has no basis in the evidence at trial. This Court today has found that the evidence at trial included testimony about the royalty rate in the Innolux jury verdict, and the three patents the jury found to have been infringed. This Court has already decided that Bratic's references to the Innolux jury verdict divided by three has sufficient basis in the evidence at trial.

LG makes additional arguments about the Bratic Supplement's use of the Innolux case which raise issues that are in part within the scope of the motion to strike, but also raise broader

questions about the validity and reliability of Bratic's theories; such aspects should be raised on a Daubert motion. LG contends that Bratic refers to the invalidation of the '088 and '970 patents in the Innolux case, which was not in evidence at trial. Mondis agreed. (Pls.' Supp. Br. at 8 n.3.) References to the invalidation of patents in the Innolux case appear in paragraphs 11 and 44. This Court has already decided to strike paragraph 11 in its entirety. As for paragraph 44, the Court strikes the reference to the invalidation of patents in the Innolux case.

LG appears to argue that *any* reference by Bratic to the evidence that the Innolux jury found infringement of three patents somehow implicates the invalidation of the '088 and '970 patents in the Innolux case, but has not persuaded this Court that this is true. This Court does not discern how a reference to the evidence that the Innolux jury found infringement of three specific patents implicates the jury's decision to invalidate two other patents, which is not in evidence. Again, this may be a question to raise on a Daubert motion.

LG also asserts that Bratic completely ignores two other patents in the '090 family, the '845 and '147 patents. LG argues that this silence is equivalent to the expression of a technical opinion that the '845 and '147 patents have no value. This is meritless. Bratic's silence on any matter falls outside the scope of the issue presently before this Court: presently before this Court is a motion to strike, and this Court cannot strike Bratic's silence. Moreover, this argument appears to go to the validity of Bratic's theories and method and might be better raised in a challenge pursuant to Federal Rule of Evidence 702.

LG also asks the Court to strike the reference in paragraph 31 to an *amicus* brief which, according to the citation in the Bratic Supplement, was written on October 30, 2019. The damages trial in the instant case reached its conclusion when the jury issued its verdict on April

12, 2019. As LG contends, that *amicus* brief could not have been referenced at trial. The Court strikes the portion of paragraph 31 that begins with, “As the United States,” through the end of paragraph 31, because it is based on matter not in evidence in the trial record.

LG argues that paragraphs 15 and 16, on the subject of blocking patents, should be struck for lack of a basis in the evidence at trial. LG argues that this Court has mandated that all of Bratic’s opinions must be based on evidence at trial, and these opinions lack such a basis. LG has interpreted this Court’s Orders more broadly than the Court intended. While LG has accurately quoted this Court’s Order filed on July 15, 2020, LG has not provided the context which gives the Order meaning. At issue was the definition of the “new theory of damages” that would not be permitted, and, in that context, this Court stated: “Mr. Bratic may express expert opinions about reasonable royalties to the extent that such opinions are based on the existing trial record *only*.” (Opinion and Order of July 15, 2020 at 2.) After vacating the jury damages verdict, this Court has consistently held that, at the retrial on damages, Mondis may not present new evidence, except that Bratic may update his expert opinion. The point of the Order of July 15 was not to require an evidentiary basis for every element in Bratic’s updated report, but to strictly limit the new evidence that could be presented at retrial. The Court’s Order, just quoted, was intended to preclude something like, for example, the Bratic Supplement’s use of the Lamm Supplement – wherein Bratic expressed expert opinions based on evidence *not* presented at trial. That was the line this Court was drawing. LG has not pointed to any use of new evidence in paragraphs 15 and 16. The motion to strike paragraphs 15 and 16 is denied.

Similarly, LG moves to strike the opinions about standardization in paragraphs 47 through 51 in the Bratic Supplement. The motion is denied for the same reason: LG has not

pointed to any use of new evidence in paragraphs 47 through 51. LG's challenges to Bratic's opinions about blocking patents and standardization implicate questions that might be better raised on a Daubert motion.

Last, LG moves to strike paragraphs 52 through 55 in the conclusion section of the Bratic Supplement. LG argues that these paragraphs contain numerous references to matter that violates this Court's Orders. Because this Court has now decided to strike much of the matter in the Bratic Supplement that the conclusion summarizes, this Court agrees that the conclusion section violates this Court's Orders. The conclusion includes much matter that has been derived by application of Alessi Apportionment, which this Court has found to be in reliance on the Lamm Supplement. The conclusion thus relies in part on the Lamm Supplement, and this Court strikes paragraphs 52 through 55 in their entirety.

In summary, the Court now completes its decision on LG's motion to strike the supplemental reports, as to the issues on which decision was reserved in the Strike Opinion. The motion to strike the Bratic Supplement is further granted in part and denied in part. The Court strikes in their entirety paragraphs 11, 12, 16, 22, 26(c), 26(d), 27, 28, 35, 36, and 52 through 55. The Court strikes footnote 24, but not the paragraph that spawned it. In paragraph 44, the Court strikes a single sentence which contains the reference to the invalidation of patents in the Innolux case, the sentence which contains the phrase "invalidated in the Innolux litigation." In paragraph 49, the Court strikes only the reference to the Lamm Supplement. In paragraph 6, Mondis has offered to change "The other patents" to "Other patents," and the Court accepts that change. The Court strikes the portion of paragraph 31 that begins with, "As the United States," through the end of paragraph 31. As to the remainder of the Bratic Supplement,

the motion to strike is denied.

For these reasons,

**IT IS** on this 2nd day of October, 2020

**ORDERED** that, as to those aspects on which this Court **RESERVED** decision in the Opinion and Order filed July 15, 2020 (Docket Entry No. 644), LG's motion to strike (Docket Entry No. 634) is **GRANTED** in part and **DENIED** in part; and it is further

**ORDERED** that, as to the Bratic Supplement, the Court strikes in their entirety paragraphs 11, 12, 16, 22 (including all subparagraphs), 26(c), 26(d), 27, 28, 35, 36, and 52 through 55; the Court strikes footnote 24, but not the paragraph that spawned it; in paragraph 44, the Court strikes a single sentence which contains the reference to the invalidation of patents in the Innolux case, the sentence which contains the phrase "invalidated in the Innolux litigation;" in paragraph 49, the Court strikes only the reference to the Lamm Supplement; in paragraph 6, Mondis has offered to change "The other patents" to "Other patents," and the Court accepts that change; the Court strikes the portion of paragraph 31 that begins with, "As the United States," through the end of paragraph 31; and it is further

**ORDERED** that, as to the remaining issues, the motion to strike is **DENIED**.

s/ Stanley R. Chesler  
Stanley R. Chesler, U.S.D.J.



**UNITED STATES DISTRICT COURT  
DISTRICT OF NEW JERSEY**

MONDIS TECHNOLOGY LTD. et al.,

Plaintiffs,

V.

LG ELECTRONICS, INC.  
et al.,

Defendants.

[illegible]

Civil Action No. 15-4431 (SRC)

## OPINION & ORDER

**CHESLER, U.S.D.J.**

This matter comes before the Court on two motions for reconsideration of the Opinion and Order dated October 2, 2020, in which this Court completed its consideration of the motion to strike the Lamm and Bratic Supplements:<sup>1</sup> 1) the motion by Defendants LG Electronics, Inc. and LG Electronics U.S.A., Inc. (collectively, “LG”); and 2) the motion by Plaintiffs Hitachi Maxell, Ltd., n/k/a Maxell Holdings, Ltd., Maxell, Ltd., and Mondis Technology Ltd. (collectively, “Mondis”). For the reasons that follow, LG’s motion will be granted, and Mondis’ motion will be denied.

Once again, this Court begins with a recap of the relevant history of this case. Once again, Mondis appears to have overlooked important parts of that history. In the motion to strike, LG asked the Court to strike the supplemental expert report of Mr. Lamm (the “Lamm

<sup>1</sup> In its motion to strike, LG filed as an exhibit the “Supplemental Expert Report of Walter Bratic,” dated June 19, 2020. (Docket Entry No. 635, Ex. B, hereinafter, the “Bratic Supplement.”)

Supplement”), as well as parts of the Bratic Supplement. In considering this motion, this Court noted that, on April 22, 2020, this Court issued an Opinion and Order which stated:

This Court grants LG’s motion for a new trial, subject to the following limitations. At the new trial, the parties may not offer evidence that was not presented at the previous trial, with one potential exception: should Mondis seek to offer the expert testimony of Mr. Bratic, based solely on the evidence presented at the previous trial, Mondis may submit an updated expert report, which this Court will consider in a Daubert hearing.

(Opinion & Order of April 22, 2020 at 9.)

Totally ignoring the Court’s directions and its Order, Mondis proceeded to create new evidence in the form of the Lamm Supplement and to submit a new expert report by Bratic which relied on the Lamm Supplement, in patent violation of the Court’s Order of April 22, 2020. Because of this, in the Opinion granting in part the motion to strike (the “Strike Opinion”), this Court held that the Lamm Supplement violated the Order of April 22, 2020, and granted LG’s motion to strike that supplementary report. (Strike Opinion at 2.) Also, in the Strike Opinion, this Court held: “To the extent that Mr. Bratic’s supplementary report contains opinions that rely, even in part, on Mr. Lamm’s unauthorized supplementary report, the motion to strike those opinions is granted, as they are in clear violation of this Court’s Order.” (Strike Opinion at 2.) This Court also held: “Mr. Bratic may express expert opinions about reasonable royalties to the extent that such opinions are based on the existing trial record *only*.” (*Id.*) This Court recognized, however, that the parties were likely to differ about the application of these rulings to the Bratic Supplement, and it Ordered supplementary briefing “[t]o assist the Court in making a ruling that provides clarity.”

This Court has now before it the fourth round of briefing which has resulted from Plaintiffs’ flagrant disregard of the Opinion & Order of April 22, 2020. This Court is now

presented with two motions for reconsideration after having been required to minutely parse the Bratic Supplement for compliance with the Court's Orders. The Court is tired of this nonsense, but proceeds to consider the motions before it.

"[A] judgment may be altered or amended if the party seeking reconsideration shows at least one of the following grounds: (1) an intervening change in the controlling law; (2) the availability of new evidence that was not available when the court granted the motion for summary judgment; or (3) the need to correct a clear error of law or fact or to prevent manifest injustice." In re Energy Future Holdings Corp., 904 F.3d 298, 311 (3d Cir. 2018); L. Civ. R. 7.1(i).

#### **I. Mondis' motion for reconsideration**

Mondis seeks reconsideration of several elements of this Court's decision to grant in part LG's motion to strike the Bratic Supplement. First, Mondis makes several similar arguments which challenge the Court's decision to strike paragraphs 11, 12, and 22. The Court will consider these arguments together because they share two characteristics: 1) Mondis fails to point to any basis for reconsideration under Third Circuit law; and 2) the arguments are predicated on a continued refusal to accept this ruling:

To the extent that Mr. Bratic's supplementary report contains opinions that rely, even in part, on Mr. Lamm's unauthorized supplementary report, the motion to strike those opinions is granted, as they are in clear violation of this Court's Order.

(Strike Opinion at 2.) The Court issued this decision on July 15, 2020. Mondis did not move for reconsideration of it, and it is now the law of this case. Ass'n of N.J. Rifle & Pistol Clubs Inc. v. AG N.J., 974 F.3d 237, 246 n.9 (3d Cir. 2020).

Mondis challenges the decision to strike paragraphs 11, 12, and 22 in the Bratic

Supplement. Mondis asks this Court to reconsider its decision and restore the words in these paragraphs that do not directly cite the Lamm Supplement. These paragraphs all: 1) express opinions; and 2) cite the Lamm Supplement. Mondis has not even attempted to make a colorable argument that the Court's decision to strike paragraphs 11, 12, and 22 fails to correctly implement the prior decision to strike those opinions which rely, *even in part*, on the Lamm Supplement.

As to paragraph 16, Mondis seeks clarification based on the observation that the Court considered two challenges to paragraph 16, accepting one and rejecting the other. Ultimately, the Court struck paragraph 16. There is no mistake here; the Order correctly reflects this Court's decision to strike paragraph 16.

As to paragraph 23, Mondis requests the Court's guidance. Mondis observes that LG has argued, in its motion for reconsideration, that the Court did not strike paragraph 23, although the Court ruled that it would strike every reference to Alessi Apportionment. Mondis concedes that paragraph 23 contains calculations which rely on Alessi Apportionment. The Court agrees with the parties that the failure to address paragraph 23 was an oversight, and that this paragraph should have been included in the list of paragraphs the Court struck.

Lastly, Mondis argues that the Court should have allowed Bratic's use of the Hon Hai ASP value of \$280, as Bratic had cited that in his original written expert report. When this Court granted LG's motion for a new trial, in the Opinion & Order of April 22, 2020, this Court held:

At the new trial, the parties may not offer evidence that was not presented at the previous trial, with one potential exception: should Mondis seek to offer the expert testimony of Mr. Bratic, based solely on the evidence presented at the previous trial, Mondis may submit an updated expert report . . .

There is no dispute that evidence that the Hon Hai ASP is \$280 was not presented at the previous trial.

The Court has provided clarification as requested by Mondis but finds no basis to reconsider any of the challenged decisions. Mondis' motion for reconsideration will be denied.

## **II. LG's motion for reconsideration**

LG asks for reconsideration of the decision on the motion to strike, contending that the Court overlooked the impact of its decisions on paragraphs 23 and 25. LG is correct. As for paragraph 23, as already discussed, the parties agree that, under the reasoning of the decision, paragraph 23 should have been struck. As to paragraph 23, the motion for reconsideration will be granted, and the Court will strike paragraph 23.

Similarly, as to paragraph 25, LG argues that the Court decided to strike every use of the Hon Hai ASP of \$280, but overlooked its appearance in paragraph 25. This too was an oversight. The Court will strike the reference to the Hon Hai ASP of \$280 in paragraph 25: "That royalty rate was calculated on the basis of 0.25% x the ASP of Hon Hai's TVs, which the parties agreed was \$280. Bratic Report ¶ 110."

LG's motion for reconsideration is granted.

For these reasons,

**IT IS** on this 6th day of November, 2020

**ORDERED** that Plaintiffs' motion for reconsideration (Docket Entry No. 678) is **DENIED**; and it is further

**ORDERED** that Defendants' motion for reconsideration (Docket Entry No. 676) is **GRANTED**; and it is further

**ORDERED** that this Court’s Opinion and Order, dated October 2, 2020, (Docket Entry No. 672), is hereby **MODIFIED** to add the following: “It is further **ORDERED** that, as to the Bratic Supplement, the Court strikes in its entirety paragraph 23; and in paragraph 25, the Court strikes the sentence which states: “That royalty rate was calculated on the basis of 0.25% x the ASP of Hon Hai’s TVs, which the parties agreed was \$280. Bratic Report ¶ 110.”

s/ Stanley R. Chesler  
Stanley R. Chesler, U.S.D.J.

**UNITED STATES DISTRICT COURT  
DISTRICT OF NEW JERSEY**

MONDIS TECHNOLOGY LTD. et al.,

Plaintiffs,

V.

LG ELECTRONICS, INC.  
et al.,

Defendants.

Civil Action No. 15-4431 (SRC)

## OPINION & ORDER

**CHESLER, U.S.D.J.**

This matter comes before the Court on the motion to exclude the expert report and testimony of Walter Bratic by LG Electronics, Inc. and LG Electronics U.S.A., Inc. (collectively, “LG”). Plaintiffs Hitachi Maxell, Ltd., n/k/a Maxell Holdings, Ltd., Maxell, Ltd., and Mondis Technology Ltd. (collectively, “Mondis”) oppose the motion. For the reasons that follow, this Court will grant the motion.

After this Court vacated the jury’s damages verdict, and ordered a retrial on damages, Mondis was permitted to submit a supplemental expert report on reasonable royalty damages. Mondis submitted the Supplemental Expert Report of Walter Bratic, dated June 19, 2020, which, after a course of motion practice that has resulted in the striking of some portions of that report, is now the subject of the instant motion (hereinafter, the “Bratic Report.”)

The Bratic Report presents five models of reasonable royalty damages, termed Observations 1 through 4, and the “Hansen Alternative” model. The Report introduces these models with the following:

I have considered 4 data points that would have impacted the outcome of the hypothetical negotiation: (1) the Innolux Verdict, (2) the Hon Hai TV License, (3) the Mondis/LG Monitor License, and (4) LG's Internal Royalty Assessment. I also considered Mr. Hansen's royalty methodology which requires adjustment to make a proper comparison with the hypothetical negotiation for a license to the '180 patent.

(Bratic Report at 8.)

Federal Rule of Evidence 702 states:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

LG moves to exclude the Report and all testimony by Bratic at the damages re-trial, pursuant to Rule 702. This Court will briefly discuss LG's challenges to the models other than Observation 1, followed by a deeper analysis of Observation 1.

LG contends that two of the five models, Observations 2 (based on the Hon Hai License) and 4 (based on the LG Internal Assessment) fail to meet the requirement to apportion: "The essential requirement is that the ultimate reasonable royalty award must be based on the incremental value that the patented invention adds to the end product." Ericsson, Inc. v. D-Link Sys., 773 F.3d 1201, 1226 (Fed. Cir. 2014).

Bratic begins Observation 2 by recounting the history of the licensing agreement between Mondis and Hon Hai, which was effective on July 1, 2011 and licensed the patents in the '090 family for use in TVs. (Bratic Report at 13.) The agreed royalty rate was \$0.70 per TV, which, expressed as a percentage, corresponds to a rate of 0.25%. (Id.) Bratic then acknowledges that



the Hon Hai license covered a set of patents, of which the ‘180 patent was but one, but distinguishes the Hon Hai license from those threshold licenses that cover an entire technical standard; Bratic contends that, because of section 4.4 of the Hon Hai licensing agreement, the full royalty amount was due even if only one claim of one licensed patent remained valid. (Id. at 13-14.)

From the get-go, the debate over whether Observation 2 meets the apportionment requirement seems to this Court to be *déjà vu* all over again. Bratic concedes that this model results in a royalty estimate that does *not* reflect only the incremental value of the ‘180 patent, and this Court has one more spirited debate before it in which Mondis argues that, nevertheless, the apportionment requirement is met. This Court has already decided this issue in this case:

a license which is designed so that the underlying patents have no incremental value cannot at the same time be evidence of “the incremental value that the patented invention adds to the end product.”

Mondis Tech. Ltd v. LG Elecs., Inc., 407 F. Supp. 3d 482, 492 (D.N.J. 2019) (quoting Ericsson).

Mondis cites the Federal Circuit’s decisions in Vectura Ltd. v. GlaxoSmithKline LLC, 981 F.3d 1030, 1032 (Fed. Cir. 2020), and Bio-Rad Labs., Inc. v. 10X Genomics Inc., 967 F.3d 1353, 1375 (Fed. Cir. 2020),<sup>1</sup> which it offers as support for its argument that distinguishes Bratic’s present approach from the use of a “threshold theory,” which this Court has previously rejected in this case. Mondis cites these two cases in support of the following general point:

*Vectura* and *Bio-Rad* confirm that there is nothing wrong per se in an expert’s methodology that reaches a conclusion that the value of a single patent-in-suit may be the same as for a bundle of patents in a comparable license, and that differences between litigants should be decided by the jury after cross-

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<sup>1</sup> In this Opinion, this Court will discuss these two more recent, precedential cases, but that does not change the fact that Mondis offers them solely to reargue an issue that was already decided in LG’s favor, and which is now the law of this case.

examination rather than by the court.

(Pl.’s Opp. Br. at 7.) This Court does not fault Bratic’s Observation 2 because of any *per se* rule, but because this Court has already ruled that the licenses in this case that charge one royalty price for a group of patents fail to satisfy the apportionment requirement and do not have built-in apportionment. The second point about differences between litigants is both general and uncontroversial.

As to Vectura, Mondis cites it because the Federal Circuit affirmed a decision in which an expert’s reasonable royalty damages theory used a license for a bundle of 400 patents to value a single patent. 981 F.3d at 1041. Vectura may post-date this Court’s 2019 decision in this case, but this Court discussed licenses which have “built-in apportionment” in that decision, and Vectura does not break any new ground: similar issues were raised in Commonwealth Sci. & Indus. Research Organisation v. Cisco Sys., 809 F.3d 1295, 1303 (Fed. Cir. 2015) (“CSIRO”). See Mondis, 407 F. Supp. 3d at 490. In Vectura, the expert, the trial judge, and the Federal Circuit all relied on the evidence that the technology disclosed in the patent-in-suit was the “key component,” the “centerpiece,” of the 400-patent license. 981 F.3d at 1041, 1039. Because of this, the Federal Circuit agreed that apportionment was “built in” to the license, which distinguishes the case.<sup>2</sup> Id. at 1042. Here, as already explained, Mondis has already made the “built in apportionment” argument, this Court has decided the issue, and it is now law of the case:

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<sup>2</sup> Moreover, the Vectura panel noted and relied on the fact that the district court found that the opponent had waived its objections to the expert’s “built-in apportionment” theory by failing to make a pre-trial Daubert motion – *not* the case here. Id. at 1042-43. For an even more recent discussion of CSIRO and other cases on these issues, see MLC Intellectual Prop., LLC v. Micron Tech., Inc., 2021 U.S. App. LEXIS 25710, at \*34-\*37 (Fed. Cir. Aug. 26, 2021).

None of these licenses can be said to have apportionment built in. None of these licenses reflects the value attributable to the features of the product which infringe claims 14 and 15 of the '180 patent, and no more.

Mondis, 407 F. Supp. 3d at 492. Nor does the Bratic Report have something new to say on this issue. Bratic continues to rely on the Lamm testimony that the '180 patent is the “heart” of the '090 family.<sup>3</sup> (Bratic Report at ¶ 8.) This did not constitute sufficient facts or data on which to base a built-in apportionment theory when this Court previously decided this issue, and it is not hearing reargument at this juncture.

Mondis also argues that Observation 2 should be admitted because: “the analysis is being presented here as supportive of the other opinions Bratic intends to render.” (Pl.’s Opp. Br. at 14.) This Court does not have Bratic’s intentions in the record before it; it has his Report, which says nothing about the use of Observation 2 to support some more comprehensive expert opinion.

Nor does the Federal Circuit’s decision in Bio-Rad – another “built-in apportionment” case – help Mondis on this point. Bio-Rad, 967 F.3d at 1376. As Mondis points out, on appeal, the parties did not dispute the proposition that infringement of a single patent could support the jury’s full damages award:

As Bio-Rad explained during oral argument, affirming the judgment of infringement on the '083 patent—which includes the only asserted apparatus claims—would leave the damages award undisturbed. 10X did not dispute this point either at oral argument or in its briefing to us.

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<sup>3</sup> Mondis tried and failed to remedy its failure at trial to provide an evidentiary basis for Lamm’s conclusory “heart” assertion when it improperly submitted a revised Lamm report, which this Court rejected. Nor does Bratic here acknowledge Lamm’s other trial testimony that the '180 patent was one of a group of four patents in the '090 family which could block a manufacturer’s use of the Plug and Play standard, and that an additional patent was “half standard essential.” See Mondis, 407 F. Supp. 3d at 493 n.4.

Id. at 1372. In the instant case, that matter is very much a subject of dispute.

Moreover, the Bio-Rad Court, in reviewing both the decision to admit the expert's testimony and the evidentiary basis for the verdict, emphasized the evidentiary basis in the record – the testimony of Sia and Tumolo, and the evidence relied on by Malackowski – for the inferences that the bundled licenses were sufficiently comparable to the patents-in-suit. Id. at 1373-77. At every step of the way, the Bio-Rad Court considered the issue of the differences between the licenses relied on and the subject of the hypothetical negotiation, as well as the adequacy of the evidence supporting inferences which accounted for those differences. Id. The Court concluded: “This is not a case in which an unsupported conclusory opinion leaves the jury with nothing but speculation.” Id. at 1377. In contrast, admitting Bratic's testimony based on the Hon Hai license would leave the jury with nothing but speculation about the incremental value of the '180 patent.

Mondis also cites these two cases to argue that the comparability of a license to the hypothetical negotiation is a matter to be explored during cross-examination and goes to the weight of the evidence, not its admissibility. As a statement of a general proposition, Vectura and Bio-Rad support this. This, however, does not mean that an expert has *carte blanche* to rely on any license he or she believes to be comparable, without the Court serving as the gatekeeper for expert testimony. Nor does it relieve the proponent of expert testimony from the burden of demonstrating admissibility under Rule 702. The Bio-Rad Court stated approvingly: “Here, the district court concluded that Mr. Malackowski had met a showing of ‘baseline comparability’ and that the ‘degree of comparability is a factual issue best addressed through cross examination.’” Bio-Rad, 967 F.3d at 1374. Here, in regard to the Hon Hai license, this Court

finds that Bratic has not made a showing of baseline comparability. Bratic's opinions based on the Hon Hai license fail to meet the requirements for admission under Rule 702(b) and will be excluded accordingly.

The Federal Circuit's discussion of these issues in Ericsson is helpful:

Prior licenses, however, are almost never perfectly analogous to the infringement action. *VirnetX*, 767 F.3d at 1330. For example, allegedly comparable licenses may cover more patents than are at issue in the action, include cross-licensing terms, cover foreign intellectual property rights, or, as here, be calculated as some percentage of the value of a multi-component product. Testimony relying on licenses must account for such distinguishing facts when invoking them to value the patented invention. Recognizing that constraint, however, the fact that a license is not perfectly analogous generally goes to the weight of the evidence, not its admissibility.

Ericsson, 773 F.3d at 1227. The Federal Circuit held that an expert's testimony must account for distinguishing facts when invoking a license to value the patented invention. With the Hon Hai license, Bratic did so only insofar as he has relied on a variant of the threshold theory that this Court has rejected as invalid. This is not a situation in which the expert has provided a colorable explanation of the distinguishing facts – some showing of baseline comparability – that the jury should be allowed to consider and assess. Instead, in Observation 2, Bratic has presented a model which does not apportion, does not make a showing of baseline comparability, and fails to meet the basic requirements for admission.

The analysis of Observation 4, based on a document termed the LG Internal Assessment, which itself was based on the Mondis/LG monitor license, is not much different: Bratic himself observed the similarity between the Hon Hai license and the Mondis/LG monitor license. (Bratic Report at ¶ 38.) For essentially the same reasons, this Court finds that Observation 4 fails to apportion and cannot be admitted. Once again, Bratic relies on a variant of the threshold

theory to escape having to account for the difference between the scope of the Mondis/LG monitor license and that of the hypothetical negotiation. This Court decided this exact issue in 2019 and it is the law of the case. Mondis, 407 F. Supp. 3d at 492-95. It will not be relitigated. That the parties themselves, in 2009, may have agreed to a license structured on a threshold basis does not relieve them, at trial in 2021, of the apportionment requirement in Federal Circuit law when they make an infringement damages case in Court.

As to Observation 3, also based on the Mondis/LG monitor license, the operation of the motions to strike has left it as a fragment of a model for reasonable royalty damages. It does not provide any estimate of a reasonable royalty. No helpful expert opinion remains in Observation 3. The opposition brief submitted by Mondis argues that Observation 3 is “legitimate.” (Pl.’s Opp. Br. at 15.) The fragment that is Observation 3 presents no expert testimony that “will help the trier of fact to understand the evidence or to determine a fact in issue.” Rule 702(a). This fragment will not be admitted.

In the “Hansen Alternative” model, Bratic modifies a model presented by LG’s expert Hansen at trial. In short, Hansen had started with the royalty rate from the Mondis/LG monitor license and apportioned by dividing that rate by 6. In the “Hansen Alternative,” Bratic contends that the royalty rate from the Mondis/LG monitor license should be apportioned by dividing that rate by 3, not 6, because the Innolux verdict concerned 3 patents. Bratic’s Report does not explain the reasoning for this, except to suggest that the fact of the Innolux verdict shows that only 3 patents out of the 16 covered by the Mondis/LG monitor license had any value. (Bratic Report at ¶ 44.) LG objects that this method is arbitrary, and, given the absence of any attempt to justify it in the Bratic Report, this Court agrees: what does the fact that there was a litigation

against a different manufacturer concerning the infringement of three patents by televisions have to do with establishing which patents covered by the Mondis/LG monitor license had what value? It does not make sense, and there is not even an attempt by Bratic to explain it.

Mondis, in its opposition brief, seems to lump together “Hansen Alternative” and Observation 3, both of which rely on the Mondis/LG monitor license. In response to LG’s challenge to the application of the number of patents in the Innolux trial to the Mondis/LG monitor license, Mondis says only this: “As to the second question (number of patents), the point has now been made repeatedly that the Innolux verdict was the last and most definitive event in the Book of Wisdom, and the hypothetical negotiators would have focused on the three Innolux basis patents.” (Pl.’s Opp. Br. at 16.) Setting aside the fact that Bratic did not write that in the Report, and that it is Plaintiff’s attempt at post-hoc justification, it still makes no sense. Bratic’s method of estimating a reasonable royalty, based on the Mondis/LG monitor license, is arbitrary. It is not the product of reliable principles and methods, as required by Rule 702(c), and it will not be admitted.

This leaves only Bratic’s Observation 1. The basis of this model is the television royalty rate set by the jury in the Innolux verdict, divided by three to apportion to only the incremental value of the ‘180 patent, because the Innolux litigation concerned the infringement by televisions of three patents, and the ‘180 patent was one of the three. LG argues that Bratic’s testimony as to Observation 1 should be excluded on three grounds: 1) Bratic’s focus on three patents from the Innolux case is problematic, and the use of three as the divisor in Observation 1 is invalid; 2) Bratic did not show that the Innolux jury verdict was sufficiently comparable to the hypothetical negotiation; and 3) a jury verdict is a “flawed tool for determining a baseline royalty rate in a

hypothetical negotiation.” (Defs.’ Br. at 22-23, quoting Uniloc USA, Inc. v. Microsoft Corp., 632 F.3d 1292, 1315 (Fed. Cir. 2011)).

This Court finds that LG has persuaded that the motion to exclude Bratic’s testimony should be granted, but not on the basis of every point. The Court need not reach the first point to decide this motion, which challenges Bratic’s selection of the number three as the apportioning divisor for the Innolux jury’s rate of .25%, but notes that it takes judicial notice under Rule 201 of the public record from that litigation, Mondis v. Innolux et al., Civil Action No. 07-565 JRG (E.D.Tx. January 15, 2010), specifically the Third Amended Complaint filed on that date, which states that Mondis asserted that Innolux televisions infringed five specific patents, and the jury verdict form shows that the jury found only three of those five to be both valid and infringed. This supports the accuracy of Spiro’s testimony that the jury verdict covered three patents for technology in televisions.

While this Court generally finds LG to be persuasive that Bratic’s use of the Innolux jury verdict in Observation 1 is very problematic, the key problem is not, as LG argues, that the jury verdict is the starting point, but that it is the only data point in the analysis. This Court bases its decision to grant the motion to exclude Bratic’s testimony about Observation 1 on three problems with that reasonable royalty theory. First, the Innolux jury verdict post-dates the date of the hypothetical negotiation, and Mondis has not demonstrated that Observation 1 is a permissible application of the doctrine of the book of wisdom. Second, the theory of Observation 1 is presented as if the Innolux jury verdict was a comparable negotiated license, which it is not; Mondis has failed to demonstrate that Bratic’s use of the jury verdict as the sole data point in his reasonable royalty estimate meets the sufficiency and reliability requirements of



Rule 702, as well as the comparability requirements of Federal Circuit law. Third, Mondis has failed to demonstrate that the apportionment method used in Observation 1 is reliable. Mondis, as the proponent of the expert testimony, bears the burden of demonstrating that it is admissible, and has failed to do so. See Fed. R. Evid. 702, advisory committee's note on the 2000 amendments (citing Bourjaily v. United States, 483 U.S. 171 (1987)).

In Observation 1, Bratic relies on evidence of a jury verdict to determine a reasonable royalty. Two Federal Circuit cases form the foundation to this discussion of admissibility and relevance of a jury verdict to the hypothetical negotiation/reasonable royalty analysis: Sprint Communs. Co., L.P. v. Time Warner Cable, Inc., 760 F. App'x 977, 980 (Fed. Cir. 2018), and the precedential case that the Sprint Court relied on, Applied Med. Res. Corp. v. United States Surgical Corp., 435 F.3d 1356, 1366 (Fed. Cir. 2006). These cases are necessary to resolve one threshold dispute: LG argues that the Innolux jury verdict does not fit any of the Georgia-Pacific factors and, in rebuttal, Mondis cites Sprint in support of the proposition that there is no *per se* rule against admitting evidence of a jury verdict for consideration in the reasonable royalty analysis. These cases continue to inform this Court's analysis after that threshold issue is resolved.

In Sprint, the district court had admitted evidence of a jury verdict in a prior case involving a party and a non-party, on the ground that it "was relevant to the jury's assessment of reasonable royalty damages under a hypothetical negotiation theory;" Time Warner appealed, contending that introduction of a jury verdict from another case was invariably improper. 760 F. App'x at 980. The Federal Circuit disagreed with Time Warner and stated that such was not the rule applied by the Federal Circuit, and that "the court has held that such evidence can be

admissible if it is relevant for some legitimate purpose.” Id. The Sprint Court relied on the Federal Circuit’s precedential decision in Applied Med. Res. Corp. v. United States Surgical Corp., 435 F.3d 1356, 1366 (Fed. Cir. 2006), in which the Court held that evidence of a jury verdict of willful infringement from just prior to the date of the hypothetical negotiation was admissible as probative of a party’s state of mind, and relevant to the hypothetical negotiation. These cases persuade this Court that, as Mondis contends, there is no *per se* rule that bars admitting evidence of a jury verdict, and that such evidence may be admitted if it is relevant to the hypothetical negotiation. Setting aside for the moment the question of whether the doctrine of the book of wisdom allows consideration of the later-occurring Innolux verdict, if the doctrine allows it, the verdict could possibly be relevant to the state of mind of both Mondis and LG at the hypothetical negotiation. That is, if the Innolux jury verdict is considered to be an event prior to the hypothetical negotiation, it might be relevant to the state of mind of both parties, and evidence of it would be admissible for that purpose. Given that the Federal Circuit found a jury verdict to be relevant to the hypothetical negotiation in both the Sprint and Applied Med. decisions, LG’s objection that the jury verdict does not fit any Georgia-Pacific factor cannot carry any weight.<sup>4</sup>

The decision that the Innolux verdict is admissible as relevant to the reasonable royalty analysis is nothing new in this case. This Court decided before trial to admit the Innolux jury verdict into evidence, and it is in the record. The question before this Court on this motion is not whether to admit the verdict itself, but whether expert testimony that derives a reasonable

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<sup>4</sup> As will be discussed further, while Sprint and Applied Med. show that a jury verdict *can have* a valid place in a Georgia-Pacific analysis, neither Mondis nor Bratic ever explains what valid place the Innolux jury verdict *does have* in Bratic’s analysis in Observation 1.

royalty estimate largely from only that evidence is admissible under Rule 702 and Federal Circuit law. Although Sprint and Applied Med. are not cases which deal with expert testimony and Rule 702, they are cases in which the Federal Circuit explained its thinking about how a jury uses evidence of a jury verdict when considering questions about the hypothetical negotiation, which is quite useful in considering other issues presented by the instant motion.

# **I. The Innolux verdict post-dates the date of the hypothetical negotiation**

LG vaguely argues that Mondis cannot rely on the doctrine of the book of wisdom to allow consideration of this later event. In support, LG only quotes from Aqua Shield v. Inter Pool Cover Team, 774 F.3d 766, 772 (Fed. Cir. 2014): “That treatment incorrectly replaces the hypothetical inquiry into what the parties would have anticipated, looking forward when negotiating, with a backward-looking inquiry into what turned out to have happened.” Mondis, in opposition, provides an even more terse response, merely citing the Supreme Court case of Sinclair and asserting that the Innolux jury verdict is contained within the book of wisdom. Neither party has developed an argument. The Court acknowledges that the Sinclair decision is controlling authority, and that it states:

But the absence of market value does not mean that the offender shall go quit of liability altogether. The law will make the best appraisal that it can, summoning to its service whatever aids it can command. At times the only evidence available may be that supplied by testimony of experts as to the state of the art, the character of the improvement, and the probable increase of efficiency or saving of expense. This will generally be the case if the trial follows quickly after the issue of the patent. But a different situation is presented if years have gone by before the evidence is offered. Experience is then available to correct uncertain prophecy. Here is a book of wisdom that courts may not neglect.

Sinclair Ref. Co. v. Jenkins Petroleum Process Co., 289 U.S. 689, 697-98 (1933) (citations omitted). These case citations leave this Court with food for thought on the question of the

application of the book of wisdom to this motion, but not more. Since Mondis, as the proponent of Bratic's testimony, bears the burden of persuading this Court that it is admissible, and that Mondis has not persuasively demonstrated the applicability of the doctrine of the book of wisdom here, Mondis has failed to demonstrate that there is a legal basis for even considering a theory based on the later-occurring Innolux verdict. The issue of timing here is particularly concerning in view of the Federal Circuit's decisions in Sprint and Applied. Med., in both of which the Federal Circuit emphasized that the hypothetical negotiators would have had actual knowledge of the prior-occurring jury verdict and that the timing of the two events (the verdict and the negotiation) was relevant to the deliberations of the jury on specific issues.

In Sprint, the trial court had admitted the prior verdict as relevant on the theory that the parties to the hypothetical negotiation would have known about it and it would have therefore informed their expectations as to a reasonable royalty, as well as been relevant to the determination of willfulness. 760 F. App'x at 981. In Applied Med. at trial, the jury heard evidence of the history of the prior litigation leading to the prior jury verdict, which was relevant to the state of mind of the accused infringer during that prior historical period, and therefore relevant to the Applied. Med. jury's determination of willfulness. 435 F.3d at 1366.

In both cases, the actual historical fact of the timing of the jury verdict was essential to the theory of relevance and admissibility. In the instant case, in contrast, Mondis has offered too little to persuade this Court that there is both a theory of relevance and controlling legal authority to support Bratic's use of the later-occurring Innolux jury verdict in Observation 1. This alone is a fatal defect that precludes admission of that testimony.

## **II. Observation 1: the Innolux jury verdict and the sufficiency, reliability, and comparability requirements**

LG argues that a jury verdict is a fundamentally flawed starting point for a reasonable royalty analysis. As already stated, this Court declines to consider what may be used as a starting point, because the more obvious problem here is that, in Observation 1, Bratic uses the Innolux jury verdict as the *only* data point in the analysis. In brief, Bratic proposes to estimate the outcome of the hypothetical negotiation by taking only the Innolux jury verdict and then applying an apportionment method, division by three.

Rule 702 states that expert testimony may be admitted if:

- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

This Court therefore must determine whether Bratic's proposed testimony about Observation 1 meets these requirements, as well as the requirements of Federal Circuit law.

Bratic provides no justification or reasoning for this use of the Innolux jury verdict, offering it as if it were a comparable licensing agreement that required no special explanation. The obvious problem is that a jury verdict is not a licensing agreement, and Bratic and Mondis have failed to demonstrate that the reasonable royalty analysis in Observation 1 – derived solely from a jury verdict – meets both the Federal Circuit's requirements for a reasonable royalty analysis and the Rule 702 requirements that the expert apply a reliable method to sufficient facts. Because Bratic and Mondis have failed to justify the use of a jury verdict alone to estimate a reasonable royalty, this Court finds that the theory of Observation 1 is fundamentally flawed and inadmissible both under Federal Circuit law and under Rule 702.

LG argues that jury verdicts are not evidence of arms-length negotiations – a point that Mondis does not dispute. In support, LG cites three district court decisions which, though not controlling, do demonstrate judicial skepticism that about the relevance of a jury verdict to the hypothetical negotiation. In Acceleration Bay LLC v. Activision Blizzard, Inc., 324 F. Supp. 3d 470, 488 (D. Del. 2018), District Judge Andrews decided a Daubert challenge to testimony in which the expert used a jury verdict as the starting point in a reasonable royalty calculation. Judge Andrews excluded the testimony on the ground that a jury verdict was not sufficiently comparable to the circumstances of the hypothetical negotiation to serve as the basis for a reliable determination of a reasonable royalty, and that the proponent of the testimony had shown no authority to the contrary. Id. See also Flexuspine, Inc. v. Globus Med., Inc., 2016 WL 9282314, at \*3 (E.D. Tex. Aug. 5, 2016) (excluding under Daubert similar testimony on ground that jury verdict was far removed from circumstances of hypothetical negotiation, and technological and economic comparability had not been established); Atlas IP, LLC v. Medtronic, Inc., 2014 WL 5741870, at \*6 (S.D. Fla. Oct. 6, 2014) (“it is self-evident jury-determined damages are not evidence of arm’s-length negotiations between parties.”) While these cases are not controlling authority, they highlight what should be a threshold question here: how is the Innolux jury verdict evidence that is informative about the outcome of the hypothetical negotiation? To cut to the chase, Mondis and Bratic have no answer to it.

This Court begins with the observation that Bratic does not at all explain the reasoning by which he connects the Innolux jury verdict to the hypothetical negotiation. The Bratic Report lays the foundation generally for the Observations in paragraph 2, citing the first and second Georgia-Pacific factors, which deal with royalties for licenses for the patent-in-suit, and rates

paid by the patentee for other comparable patents.<sup>5</sup> See Ga.-Pacific Corp. v. United States Plywood Corp., 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970). The Innolux jury verdict fits into neither of these categories.

The only statement in the Bratic Report that lays a foundation for the use of a jury verdict instead of a license is this one: “This is a very instructive comparable data point that can be used to inform the result of the hypothetical negotiation.” (Bratic Report at ¶ 18.) Bratic then writes: “In order to adjust the circumstances of the Innolux Verdict to the circumstances of the hypothetical negotiation, in which only the ‘180 patent would have been at issue, I have adjusted the Innolux Verdict royalty rate for the relative values of the ‘180, the ‘090 and the ‘342 patents.” (Bratic Report at ¶ 19.) Bratic then states that he disagrees with the use of patent counting to apportion, which Hansen did, but proceeds to do a calculation of a reasonable royalty estimate by applying a method he attributes to Hansen. (Bratic Report at ¶ 21.)

This summarizes Bratic’s explanation for his use of the Innolux jury verdict in Observation 1; it leaves out nothing that he stated about the reasoning by which he connected the Innolux jury verdict to the hypothetical negotiation. It is apparent that Bratic offers nothing to justify or explain his use of the Innolux jury verdict in Observation 1. Bratic has laid a foundation for the use of licenses in a reasonable royalty analysis, but a jury verdict is not a license. Nor does Bratic even attempt to articulate a rationale to persuade that the Innolux jury verdict is evidence informative of the outcome of the hypothetical negotiation, or relevant to it.

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<sup>5</sup> The word “rates” in the Georgia-Pacific decision does not obviously exclude a rate set by a jury verdict, but the Federal Circuit has understood factor 2 to apply to rates in licenses: “This factor examines whether the licenses relied on by the patentee in proving damages are sufficiently comparable to the hypothetical license at issue in suit.” Lucent Techs., Inc. v. Gateway, Inc., 580 F.3d 1301, 1325 (Fed. Cir. 2009).

Instead, Bratic merely drops the jury verdict into the analysis with a conclusory assertion that it is comparable, instructive, and can be used to inform the result of the hypothetical negotiation. This is entirely unsupported. There is nothing there to persuade this Court that the Innolux jury verdict has a proper role as the sole data point in this reasonable royalty analysis.

The Court now considers Bratic's use of the Innolux verdict in Observation 1 in view of the relevant Federal Circuit cases. In Sprint, the Court summarized the rationale underlying the district court's decision to admit evidence of the verdict as follows:

In this case, the court admitted the prior verdict evidence as relevant to willfulness, to Time Warner's equitable defenses, and "to the extent that it informs Sprint's executives concerning what [they] might expect as a reasonable royalty." Thus, as the court explained, the verdict would be a factor of which the parties would have been aware at the time of their hypothetical negotiation in 2010, and a reasonable jury could well conclude that the verdict and the amount of damages awarded in a similar prior litigation would have influenced the outcome of a hypothetical negotiation in the case at bar.

760 F. App'x at 981. The Federal Circuit concluded that the district court had not committed reversible error in admitting the evidence. Id. at 982.

As already stated, the Sprint Court relied on its previous precedential decision in Applied Med. In that case, the Federal Circuit reviewed the district court's decision that a prior jury verdict was admissible because it was relevant to the state of mind of a party to the hypothetical negotiation: the Federal Circuit agreed that it "was relevant to the reasonable royalty analysis because the hypothetical negotiation in 1997 took place on the heels of the Applied I jury verdict." Applied Med., 435 F.3d at 1366. Thus, the theory of relevance was that the parties would have been aware of the verdict and that it could have impacted their thinking in the hypothetical negotiation. The theory of relevance in Sprint was similar but more specific, adding that the awareness of the verdict might have impacted one party's expectations about a



reasonable royalty.

In view of the fact that this Court has already admitted the Innolux jury verdict, and that its relevance is not at issue, Sprint and Applied Med. are more problematic than helpful to Mondis on this motion. In both of those cases, the offered jury verdict had occurred prior to the date of the hypothetical negotiation, and the Federal Circuit stated a theory of relevance based on the likelihood that the parties to the hypothetical negotiation would have had actual knowledge of that verdict. Moreover, in both cases, the Federal Circuit's theory of relevance provided a rationale that supported the likelihood that the parties to the hypothetical negotiation would have found the jury verdict relevant to their hypothetical task. In Sprint, the Federal Circuit observed that the district court had found the verdict relevant to damages "to the extent that it informs Sprint's executives concerning what [they] might expect as a reasonable royalty." 760 F. App'x at 981. The Federal Circuit agreed that "a reasonable jury could well conclude that the verdict and the amount of damages awarded in a similar prior litigation would have influenced the outcome of a hypothetical negotiation in the case at bar." Id. In the instant case, neither Mondis nor Bratic have even suggested a basis to conceive that the Innolux jury verdict could have impacted the royalty expectations of the parties to the hypothetical negotiation, nor influenced the outcome. In Applied Med., the Federal Circuit concluded that evidence of the prior jury verdict was relevant to the reasonable royalty analysis on the issue of willfulness, that it related to one party's state of mind in regard to the willfulness of infringement. 435 F.3d at 1366. The Federal Circuit noted that there was evidence at trial that both the filing of the litigation as well as the jury verdict had been known by the accused infringer and had influenced it to alter its relevant conduct. Id.

In both Sprint and Applied. Med., then, the Federal Circuit found that the prior jury verdict would likely have been relevant evidence for the jury in the case at bar in their consideration of the hypothetical negotiation, supported by a fairly specific rationale. In the instant case, in contrast, neither Mondis nor Bratic have offered any theory of relevance: setting aside the problem of the timing, Bratic has offered no rationale to explain how and why the Innolux jury verdict, if known, might impact the thinking of the parties to the hypothetical negotiation.

This Court will not fill in the blank in Bratic’s model and Mondis’ case. Bratic’s passive phrasing – “can be used to inform the result” – says nothing substantive about who would use knowledge of the jury verdict, and how it might be used, to affect the result of the hypothetical negotiation. Bratic’s introductory assertion that the Innolux verdict is a data point which “would have impacted the outcome of the hypothetical negotiation” is conclusory and devoid of any justifying explanation. (Bratic Report at 8.) Bratic’s assertion that he is attempting “to adjust the circumstances of the Innolux Verdict to the circumstances of the hypothetical negotiation” is uninformative. The Court has no idea what this means and neither Bratic nor Mondis makes any attempt to explain it. Moreover, this Court suspects that Bratic – who was not short for words and explanations in his original report – did not provide a theory of relevance because he does not have one.<sup>6</sup>

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<sup>6</sup> Nor did Bratic clearly make a case for the verdict’s relevance in his original report, contrary to LG’s contention that, in Bratic’s 2018 report, he used the Innolux verdict as a reasonableness check on his estimate. (LG’s Br. at 22.) While the 2018 report does propose a reasonableness check, it both distinguishes and blurs together the jury verdict and the ensuing settlement. (Bratic 2018 Report, Walsh 11/28/18 Dec. Ex. A at ¶¶ 229-30.) In the 2018 Report, Bratic distinguished the verdict and the ensuing settlement as different in scope and patents covered, and it is not clear which he thought confirmed his estimate based on the licenses. In any case,

In short, Bratic and Mondis have given this Court barely the veneer of an explanation of how the Innolux jury verdict, even with the help of the doctrine of the book of wisdom, could have impacted the hypothetical negotiation, or could be evidence of its outcome. No attempt has been made to make any connection between them, nor to show that Bratic has applied a reliable method to sufficient data.

LG raises similar issues in arguing that the Innolux jury verdict is not comparable to the hypothetical negotiation. Plaintiff's opposition brief does not even dispute LG's comparability challenge, and it would be difficult to do so, again for the reason that a jury verdict is not a license. A key case on comparability to the hypothetical negotiation is Lucent.

In Lucent Techs., Inc. v. Gateway, Inc., 580 F.3d 1301, 1327 (Fed. Cir. 2009), the trial court jury had awarded a lump-sum reasonable royalty payment, and the issue on appeal was, *inter alia*, whether the jury verdict was supported by substantial evidence; unlike this case, there was no dispute over the admission of any of the evidence or expert testimony. The Federal Circuit reviewed the evidence at trial in light of the Georgia-Pacific factors and, based on a number of considerations, concluded that the verdict was not supported by substantial evidence, but merely by speculation, and the Court vacated it. Id. at 1335. In considering the evidence with regard to Georgia-Pacific factor 2, "whether the licenses relied on by the patentee in proving damages are sufficiently comparable to the hypothetical license at issue in suit," the Federal Circuit found that none of the evidence was sufficient, for various reasons. Id. at 1325. The Court stated first: "some of the license agreements are radically different from the

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an observation that a piece of evidence is "confirmatory" is not a theory that the evidence, if known at the time of the hypothetical negotiation, might have impacted it. (Id. at ¶ 230.)

hypothetical agreement under consideration,” while, for others, the evidence did not make clear the subject matter of the licenses. Id. at 1327-28. The Court observed that the expert’s testimony provided no analysis of the comparability of the licenses:

Lucent had the burden to prove that the licenses were sufficiently comparable to support the lump-sum damages award. The law does not require an expert to convey all his knowledge to the jury about each license agreement in evidence, but a lump-sum damages award cannot stand solely on evidence which amounts to little more than a recitation of royalty numbers, one of which is arguably in the ballpark of the jury’s award, particularly when it is doubtful that the technology of those license agreements is in any way similar to the technology being litigated here.

Id. at 1329. This quote is particularly on point here: Bratic’s Observation 1 is fairly described as little more than a recitation of royalty numbers, with no analysis of comparability nor rationale for considering the verdict as relevant and meaningful to the hypothetical negotiation.

The Lucent Court also observed that four of the licenses covered running royalties and not lump-sum royalties:

As we noted above, certain fundamental differences exist between lump-sum agreements and running-royalty agreements. This is not to say that a running-royalty license agreement cannot be relevant to a lump-sum damages award, and vice versa. For a jury to use a running-royalty agreement as a basis to award lump-sum damages, however, some basis for comparison must exist in the evidence presented to the jury. In the present case, the jury had almost no testimony with which to recalculate in a meaningful way the value of any of the running royalty agreements to arrive at the lump-sum damages award.

Id. at 1330. Again, this point is quite applicable to the instant case: a jury verdict can be relevant to a reasonable royalty determined by the hypothetical negotiation analysis, but *some basis for comparison must exist in the evidence presented to the jury*. Bratic’s Report offers no basis upon which the jury could “recalculate in a meaningful way” the valuation of the ‘180 patent implied by the jury verdict to arrive at a reasonable royalty based on a hypothetical

negotiation. Id.

Furthermore – as if Lucent isn’t adverse enough to Mondis already –, the Lucent Court then examined in detail the differences between the running royalty licenses and the jury award. Id. at 1330-31. The similarities and differences between the circumstances of the licenses and those of the hypothetical negotiation were scrutinized. Id. In the instant case, the analysis in Bratic’s Observation 1 and Plaintiff’s opposition brief, if presented at the damages re-trial, would not be adequate to inform the jury about how to connect the verdict to the reasonable royalty analysis. Rather, in Observation 1, Bratic merely states:

In order to adjust the circumstances of the Innolux Verdict to the circumstances of the hypothetical negotiation, in which only the '180 patent would have been at issue, I have adjusted the Innolux Verdict royalty rate for the relative values of the '180, the '090 and the '342 patents.

(Bratic Report ¶ 19.) This is entirely insufficient as an analysis of the similarities and differences between the circumstances of the Innolux jury verdict and those of the hypothetical negotiation.

The Lucent Court next reviewed the infringer’s case and, in conclusion, found that there was too little evidentiary basis for the jury’s award of a lump sum three to four times greater than the average of royalties in the lump sum licenses in evidence, and that “no reasonable jury could have found that Lucent carried its burden of proving that the evidence” supported the jury award. Id. at 1332, 1335.

In the instant case, Bratic’s Observation 1 does not provide an adequate evidentiary basis to sustain a jury award in agreement with it. Bratic and Mondis have offered nothing more than some numbers, with no information that could help a jury sensibly use those numbers to determine the outcome of the hypothetical negotiation. See also Wordtech Sys. v. Integrated

Networks Sols., Inc., 609 F.3d 1308, 1319, 1322 (Fed. Cir. 2010) (evidence presented to the jury about eleven other more dissimilar licenses provided no basis for comparison to the hypothetical negotiation; the Federal Circuit concluded that the jury verdict was “based only on speculation or guesswork” and vacated it); ResQNet.com, Inc. v. Lansa, Inc., 594 F.3d 860, 870 (Fed. Cir. 2010) (expert gave unconvincing reasons for even considering certain licenses).

In Lucent, Wordtech, and ResqNet, the Federal Circuit did not review decisions on Daubert motions, but two newer cases are in that procedural context, Bio-Rad and MLC. In Bio-Rad, the Federal Circuit reviewed both the trial court’s decision to admit the testimony of the expert, as well as the issue of whether the jury verdict was supported by substantial evidence, as appellant 10X challenged both. 967 F.3d at 1372. As to the expert testimony, 10X argued that the testimony should not have been admitted “because it was based on evidence that was ‘both inadmissible and insufficient.’” Id. at 1373. At issue was the comparability of the licenses to the hypothetical negotiation and, as already discussed, the Federal Circuit held that the expert’s demonstration of “baseline comparability” was sufficient to support the decision to admit the testimony. Id. at 1374. Bio-Rad, therefore, deals with the same argument LG has raised here, in a parallel procedural context, a motion to exclude expert testimony. Because this Court finds that, in Observation 1, Bratic has offered nothing to demonstrate baseline comparability of the Innolux jury verdict to the hypothetical negotiation, pursuant to Bio-Rad, his testimony cannot be admitted.<sup>7</sup>

The appellant in Bio-Rad also raised the issue of comparability of licenses in arguing that

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<sup>7</sup> Because Bratic made no demonstration of baseline comparability, this Court need not reach LG’s argument that the Innolux verdict itself was based on a threshold theory and is therefore not comparable.

the jury verdict was not supported by substantial evidence. Id. The Federal Circuit concluded that the evidence of comparability at trial supported the jury verdict. Id. at 1376. In conclusion, the Federal Circuit stated:

[W]e conclude that substantial evidence supports Mr. Malackowski's reasonable royalty opinions and the jury's verdict . . .

This is not a case in which an unsupported conclusory opinion leaves the jury with nothing but speculation. We thus agree with the district court that Mr. Malackowski's testimony was properly admitted. We therefore affirm the damages award.

Id. at 1376, 1377. Here the circumstances are the inverse of Bio-Rad: this *is* a case in which an unsupported conclusory opinion would leave the jury with nothing but speculation. Bio-Rad teaches clearly that admission of such an opinion is improper. See also MLC, 2021 U.S. App. LEXIS 25710 at \*15 (affirming grant of motion to exclude where expert's reasonable royalty testimony failed to meet the requirements of Rule 702).

In Observation 1, Bratic treats the Innolux jury verdict as if it were a license, based on nothing more than the conclusory assertion that it is “a very instructive comparable data point.” (Bratic Report ¶ 18.) The Federal Circuit has held: “When relying on licenses to prove a reasonable royalty, alleging a loose or vague comparability between different technologies or licenses does not suffice.” LaserDynamics, Inc. v. Quanta Comput., Inc., 694 F.3d 51, 79 (Fed. Cir. 2012). In Observation 1, Bratic does no more than allege a vague comparability of something that is not a license. Mondis and Bratic have not established the necessary comparability.

At best, the Innolux jury verdict reflects the lay opinion about the appropriate reasonable royalty award in a different case with different defendants and a different mix of products.

Mondis has given this Court no basis to find that it is equivalent to a negotiated license between those litigants. At most, Sprint and Applied. Med. teach that such evidence may be a factor that the hypothetical negotiators might consider. In Observation 1, Bratic does not articulate any similar theory or use of the Innolux verdict. The Federal Circuit recently held: “prior licenses or settlements need to be sufficiently comparable for evidentiary purposes and any differences in circumstances must be soundly accounted for.” MLC, 2021 U.S. App. LEXIS 25710 at \*37 (quoting Elbit Sys. Land & C4I Ltd. v. Hughes Network Sys., LLC, 927 F.3d 1292, 1299 (Fed. Cir. 2019)). Mondis has given this Court no basis to find that the Innolux jury verdict *is* evidence that is informative about the outcome of the hypothetical negotiation. Instead, Observation 1 is little more than a recitation of royalty numbers. Because Mondis has established no connection between the Innolux verdict and the hypothetical negotiation, this Court arrives at two interrelated conclusions: 1) the theory in Observation 1 does not meet the comparability requirements in Federal Circuit law; and 2) Observation 1 fails to meet the requirements of Rule 702.

The determination that, in Observation 1, Bratic has provided virtually no support for his conclusions has a domino effect on the Court’s findings on the elements of Rule 702. This Court finds that the proposed testimony is not based on sufficient facts or data, as required by Rule 702(b). The proposed testimony is not the product of reliable principles and methods, as required by Rule 702(c), and therefore has not met the requirement of Rule 702(d). See ePlus, Inc. v. Lawson Software, Inc., 700 F.3d 509, 523 (Fed. Cir. 2012) (affirming trial court’s exclusion of expert’s testimony on the ground that it was “flawed and unreliable”). Because Bratic’s proposed testimony has insufficient support for his conclusions, such testimony can only



mislead or confuse the jury: the danger is that the jury would be swayed by the fact that the Court has admitted Bratic as an expert and will accept his conclusions as correct for that reason alone. Bratic's proposed testimony would not help the jury to understand the evidence,<sup>8</sup> as required by Rule 702(a).<sup>9</sup>

### **III. Is the apportionment method reliable?**

In Observation 1, Bratic apportions the Innolux verdict by dividing by 3, derived from the three patents for which the jury made the award for infringement by televisions. In Observation 1, the Bratic Report states:

20. The core issue regarding apportionment of value among the '180, the '090 and '342 patents is whether such apportionment should be based on quantitative and qualitative analysis, as I believe should be done, or based on mechanical patent counting, which was the methodology Mr. Hansen adopted. I disagree with mechanical patent counting generally, and in this case it understates the apportioned value of the '180 patent in this case significantly.

21. Mr. Hansen's approach to apportionment involved dividing the royalty rate in the Mondis / LG Monitor License by the number of relevant patents. As noted above, the jury found 3 patents infringed in the Innolux Verdict. Applying Mr. Hansen's apportionment methodology (dividing by 3), the royalty rate for the '180 patent alone would be 0.25%.

In laying the foundation for the Observations, the Bratic Report stated: "I note that merely counting the number of patents and dividing is not enough." (Bratic Report ¶ 5.) In the

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<sup>8</sup> Moreover, this Court is not persuaded that Observation 1 exhibits the use of any scientific, technical or other specialized knowledge, as required by Rule 702(a). Observation 1 says very little more than that one can divide the .75% rate in the Innolux jury verdict by 3 for the three patents, and there is a royalty rate.

<sup>9</sup> The Supreme Court made this point in Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 591 (1993), when it approvingly quoted the Third Circuit's decision in United States v. Downing, 753 F.2d 1224, 1242 (3d Cir. 1985): "An additional consideration under Rule 702 -- and another aspect of relevancy -- is whether expert testimony proffered in the case is sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute."

footnote, to that statement, the Report states: “raw patent counting is inappropriate.” (Bratic Report ¶ 5 n.4.) Bratic explains: “In order to determine the relative value of the '180 patent, compared to the other licensed patents and thereby make the necessary adjustment, the pertinent features of the patents in question for which a particular royalty was paid need to be identified and compared.” (Bratic Report ¶ 5.)

Mondis thus asks this Court to admit expert testimony under Rule 702, which requires that the testimony be based on sufficient facts or data, and the product of reliable principles and methods, when the expert himself has stated his opinion that he disagrees with that method, thinks it inappropriate and insufficient, and recommends an entirely different approach. Here, Bratic states that it understates the value “significantly.” On what basis *could* this Court find that this testimony is the product of reliable principles and methods, when Bratic himself states the contrary?

Then, in paragraph 21, Bratic takes the method (mechanical patent counting) that he disparages, from an example in which Hansen used a license, and, without any explanation or justification, applies it to a jury verdict. Neither Mondis nor Bratic have provided any justification for treating a jury verdict as equivalent to a license. Mondis has failed to provide any basis for this Court to conclude that this is a reliable method of apportionment. Mondis cannot convince this Court that expert testimony that discredits a method, but then relies on that discredited method, is helpful to the trier of fact.

#### **IV. Conclusion**

None of the five reasonable royalty theories in the Bratic Report are admissible. Observations 2 and 4 fail to apportion under the law of this case. Observation 3 is a fragment.

“Hansen Alternative” relies on principles that are unsupported and not reliable. Observation 1 cannot be admitted for three reasons: 1) Mondis has failed to persuade that the later-occurring Innolux jury verdict would be relevant under the doctrine of the book of wisdom; 2) Bratic’s use of the Innolux jury verdict does not apply reliable principles to sufficient facts, as required by Rule 702, nor does it comply with the comparability requirements in Federal Circuit law; and 3) Bratic’s disparagement of his apportionment method precludes finding it sufficiently reliable.

This Court agrees with LG that “Mr. Bratic has squandered his second opportunity to present a legally permissible damages theory.” (Def.’s Br. at 39.) LG’s motion to exclude the Report and testimony of Walter Bratic is granted in its entirety.

For these reasons,

**IT IS** on this 8th day of September, 2021

**ORDERED** that LG’s motion to exclude the expert report and testimony of Walter Bratic (Docket Entry No. 695) is **GRANTED**, and the Report and testimony of Walter Bratic are excluded in their entirety.

s/ Stanley R. Chesler  
Stanley R. Chesler, U.S.D.J.

**DOCKET 715**

**FILED UNDER SEAL IN**

***MONDIS TECHNOLOGY LTD. ET AL.***

**V.**

***LG ELECTRONICS INC. ET AL.***

**Civil Action No. 2:15-cv-004431-SRC-CLW**

**Appx325 – Appx440**

**UNITED STATES DISTRICT COURT  
DISTRICT OF NEW JERSEY**

<p>MONDIS TECHNOLOGY LTD. et al.,</p> <p style="text-align: center;">Plaintiffs,</p> <p style="text-align: center;">v.</p> <p>LG ELECTRONICS, INC. et al.,</p> <p style="text-align: center;">Defendants.</p>	<p>:</p> <p>:</p> <p>:</p> <p>:</p> <p>:</p> <p>:</p> <p>:</p> <p>:</p> <p>:</p> <p>:</p> <p>:</p>	<p>Civil Action No. 15-4431 (SRC)</p> <p style="text-align: center;"><b>OPINION &amp; ORDER</b></p>
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**CHESLER, U.S.D.J.**

This matter comes before the Court on the motions *in limine* filed by Defendants LG Electronics, Inc. and LG Electronics U.S.A., Inc. (collectively, “LG”) and Plaintiffs Hitachi Maxell, Ltd., n/k/a Maxell Holdings, Ltd., Maxell, Ltd., and Mondis Technology Ltd. (collectively, “Mondis”). Mondis has filed three motions *in limine* and LG has filed five motions *in limine*. The Court held oral argument on both of the first motions *in limine* by Zoom teleconference on January 9, 2023. For the reasons that follow, this Court will grant the motions in part and deny them in part.

The parties’ motions raise disputes which, in significant part, turn on two key questions: 1) what is the meaning of: “At the new trial, the parties may not offer evidence that was not presented at the previous trial”? (Opinion and Order of April 22, 2020 at 9) (the “April Ruling”); and 2) at the new trial, what reasonable royalty theories may Plaintiffs argue to the jury? The Court begins with these fundamental questions, and then will turn to the particulars of the motions *in limine*.

**I. No new evidence**

In the April Ruling, this Court stated: “At the new trial, the parties may not offer evidence that was not presented at the previous trial,” subject to one exception for a revised report from Bratic, which was subsequently excluded in a Daubert decision. The parties’ motions *in limine* seek clarification on the exact meaning of this statement. The statement means the following: 1) unless otherwise excluded, evidence and testimony presented at the previous trial may be presented at retrial, to the same extent and in the same form; 2) no new evidence or testimony – that is, no evidence or testimony that was not presented at the previous trial – may be presented at retrial. No witness may change the scope or content of testimony at retrial from the scope and content of testimony at the previous trial. No testimony at retrial may vary from that testimony presented at the previous trial. Only previously admitted evidence will be admitted at retrial. In the discussion that follows, the Court will refer to this decision as the “no new evidence” decision.

**II. No new reasonable royalty theories**

In the April Ruling, this Court gave Mondis the opportunity to submit a revised expert report, containing new reasonable royalty theories, to be the subject of a Daubert motion. The revised report from Plaintiffs’ expert, Bratic, was excluded in its entirety when this Court granted LG’s Daubert motion. Bratic’s previously espoused theories have been found by the Court to be invalid under Federal Circuit law, and neither Bratic’s testimony nor his reasonable royalty theories may be presented at retrial. This leaves Mondis with only the reasonable royalty theories of LG’s expert, Hansen, at retrial. Mondis may argue for a reasonable royalty based on

Hansen’s testimony, but may not modify or change Hansen’s reasonable royalty theory, except in one way: because Hansen testified at the first trial in support of the uncertainty discount (see Opinion and Order of September 24, 2019 at 23), Mondis may argue that a reasonable royalty theory from Hansen should be modified to reflect the principle of the uncertainty discount, and Mondis may argue to the jury, based on the existing evidence of record, and the relevant law as to the hypothetical negotiation, how to compute the uncertainty discount and how it should be applied to Hansen’s reasonable royalty theory. No other modifications of Hansen’s reasonable royalty theory – such as a change in the number of relevant patents in the divisor from five to three, for example – will be allowed at retrial. In the discussion that follows, the Court will refer to this decision as the “no new reasonable royalty theories” decision.

The “no new evidence” and “no new reasonable royalty theories” decisions (together, the “No New Decisions”) resolve many of the issues raised by the parties in the motions *in limine*. The scope and content of the retrial is largely a subset of the previous trial, omitting Bratic’s testimony and his reasonable royalty theories, as well as evidence not relevant to the issues of reasonable royalty damages. The only new elements to be permitted at retrial are: Mondis may rely on Hansen’s reasonable royalty theories, Mondis may argue to the jury for the application of the uncertainty discount principle to Hansen’s reasonable royalty theories, and LG may argue against that.

Much of what Mondis has requested in the motions *in limine* concerns new testimony and arguments not permitted under the No New Decisions. Much of what LG has requested in the motions *in limine* concerns restrictions on what Mondis may do at retrial; much of these restrictions concern new testimony and arguments not permitted under the No New Decisions.

To the extent that LG now, for the first time, seeks to restrict content allowed and presented at the previous trial, as Mondis argued in opposition, LG's objections are likely new and waived.

### III. The motions *in limine*

The Court now turns to the particulars of the specific motions.

#### A. Plaintiffs' and Defendants' first motions on Hansen as a witness

In line with the two key decisions, Hansen may be called as a witness and he may present the same testimony that he offered at the previous trial. As Mondis contends, the decision that Plaintiffs may rely on Hansen's testimony at retrial is implicit in this Court's decision to grant a new trial. Moreover, LG "recognizes that it is within this Court's discretion to permit Plaintiffs to call Mr. Hansen in their case-in-chief." (Def.'s MIL #1 Br. at 5.)

At oral argument, the Court conducted a colloquy with the parties on the issues related to Hansen's testimony at retrial. Both Mondis and LG expressed concern about the potential for jury confusion at the retrial, confusion that might arise from Mondis calling LG's expert, Hansen, for its case-in-chief. LG proposed that this Court follow the model provided by Judge Andrews in AVM Techs., LLC v. Intel Corp., Civ. Action No. 15-33-RGA (D. Del. May 2, 2017).<sup>1</sup> LG argued that informing the jury about who had originally retained the expert witness would confuse it, and that this Court should "skip over" informing the jury that LG had retained Hansen, just as Judge Andrews did in AVM. Mondis argued that the situation in AVM was quite different from that of the instant case, and also that LG's proposal would leave the jury

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<sup>1</sup> In brief, at trial in AVM, Judge Andrews considered the question of how to handle a similar problem at trial. (Excerpted Trial Transcript (Def.'s MIL #1 Walsh Dec. Ex. E) at 709.) Judge Andrews ruled that an accurate explanation of who retained the expert witness would confuse the jury, and decided that the parties should "skip over" the issue. (Id. at 710, 741.)



more confused, not less.

This Court is persuaded that Mondis has proposed the better way to handle this issue. Because this Court has determined that the parties may present any prior witness testimony at retrial, and because Hansen testified at the prior trial that he was both retained and paid by LG, that information could be revealed at retrial; were the Court to adopt LG's proposal, that revelation has the potential to lead to even greater jury confusion. Under the circumstances of this case, the proposal offered by Mondis appears less likely to confuse the jury. No information about which side retained Hansen will be withheld from the jury at retrial. Instead, prior to trial, LG should submit to the Court a proposed instruction which informs the jury about who retained Hansen.

Because this Court has ruled that no witness may offer retrial testimony that varies from the scope and content of testimony at the prior trial, leading questions will be allowed for their practical value in facilitating this. Any party examining Hansen – or any other witness – may ask leading questions insofar as the leading questions lead to a restatement of the witness's previous testimony. **No new testimony may be elicited from any witness.** The parties shall confer before trial about the use of leading questions so as to allow the examinations of Hansen to proceed as smoothly as possible.

LG asks this Court to institute various "safeguards," which appear largely to be restrictions on what Mondis can do in examining Hansen. LG has not persuaded the Court that, given the major restrictions that this Court has already imposed – the No New Decisions –, any further restrictions are warranted.

LG asks this Court to preclude Plaintiffs from questioning Hansen about the Varian case,

and “should exclude the Varian testimony as a basis for an uplift multiplier.” (Pl.’s MIL #1 Br. at 28.) Mondis, in opposition, states that Hansen’s “admissions in the Varian litigation were used for impeachment purposes, not as substantive evidence.” (Pl.’s MIL #1 Opp. Br. at 36-37.) Mondis may elicit the same testimony at retrial for the same purpose of impeachment of Hansen.

Plaintiffs’ first motion *in limine* will be granted. Defendants’ first motion *in limine* will be denied.

B. Plaintiffs’ second motion *in limine*

The Court’s “no new evidence” decision has addressed the issues raised in this motion. Insofar as the motion sought a clear ruling on the admissibility of new evidence, the motion is granted in part.

C. Plaintiffs’ third motion *in limine*

Mondis asks the Court to bar LG from: 1) arguing noninfringement at retrial; and 2) eliciting Dr. Stevenson’s testimony regarding his testing of LG products. In response to the first point, LG avows not to argue noninfringement at retrial. In response to the second point, LG argues: “Dr. Stevenson’s testing evidence provided a factual predicate for a damages opinion offered by Mr. Hansen.” (Pls.’ MIL #3 Opp. Br. at 7.) The trial transcript supports LG’s position. Hansen stated that he relied on Stevenson’s testing as a factor in his reasonable royalty analysis and provided a summary of Stevenson’s relevant result. (Tr. 1211:14-1212:16.) To the extent that Stevenson’s testimony regarding his testing of LG products establishes a factual predicate for a Hansen reasonable royalty opinion, LG may elicit his testimony at retrial.

Plaintiffs’ third motion *in limine* will be denied.

D. LG's second motion *in limine*

LG moves to preclude Mondis from presenting at retrial: 1) any information about the jury verdicts from the previous trial; 2) any evidence or argument supporting the jury's determinations of liability or willfulness; and 3) any references to the previous retrial. In response, Mondis avows that, at re-trial, it will not refer to the vacated damages award, nor the jury determination of willfulness, but opposes LG's motion as to the remaining points.

Mondis first argues that the fact of the determination of infringement is highly relevant to the issues at retrial and is the legal predicate for the award of damages. The Court agrees with Mondis and does not see how Mondis can present its case at retrial without in some way informing the jury that there has been a prior determination that LG infringed the '180 patent. There is no getting around the legal fact that the determination of LG's infringement is a predicate for the retrial and there is no way to retry damages without anyone mentioning this. Mondis offers several examples from similar cases, showing how retrial juries were informed about the infringement, and it can be done in a simple and straightforward fashion. (LG's MIL #2 Opp. Br. at 4-6.)

The Court also agrees that a sweeping rule that bans presentation of any evidence or testimony that supported the jury determinations of liability or willfulness has far too broad a scope. Such a rule is misformulated: the key question at this juncture is whether evidence is relevant to the damages determination, and there is no reason to presume that evidence is relevant to one issue and one issue only. Mondis must be allowed to present any evidence and testimony from the previous trial that is relevant to the determination of damages,<sup>2</sup> and it must

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<sup>2</sup> For example, Stevenson's testing, already discussed, may have been relevant to the finding of

be allowed to present background information about the technology and the infringing product. Mondis contends: “At the minimum, the jury needs to understand the basic nature and background of the claimed invention and the infringing product.” (LG’s MIL #2 Opp. Br. at 8.) The Court agrees: Mondis may present again evidence and testimony that provides background information that is useful to help the jury understand the patent at issue and how LG’s products infringed.

Similarly, LG asks for a sweeping ruling that no party may reference the previous trial – again, a rule with far too broad a scope. LG acknowledges that, at retrial, the parties may have occasion to refer to a “prior proceeding” and to testimony from the previous trial as testimony from a “prior proceeding under oath” or “prior testimony.” To the extent that LG asks that the phrase “prior proceeding” be substituted for the word “trial,” LG’s motion will be granted, but this is *not* a ban on any reference to the previous trial. To the extent that LG asks for a ban on any reference to the previous trial, LG’s motion will be denied.

#### E. LG’s third motion *in limine*

LG describes its third motion as seeking to enforce this Court’s prior rulings. LG first raises the issue of new evidence, already resolved by this Court’s determinations in the No New

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liability at the previous trial, but is also relevant to the determination of damages, since Hansen relied on that evidence. Similarly, evidence and testimony related to willfulness may also be relevant to the determination of damages, such as pre-suit negotiations between the parties. See, e.g., Commonwealth Sci. & Indus. Research Organisation v. Cisco Sys., 809 F.3d 1295, 1303 (Fed. Cir. 2015) (“the district court did not err in valuing the asserted patent with reference to end product licensing negotiations.”) In its opposition brief, Mondis identifies four exemplary exhibits, admitted at the previous trial, which are relevant evidence of the parties’ pre-suit communications and negotiations. (LG’s MIL #2 Opp. Br. at 13-15.) Such evidence is relevant to damages and will not be excluded, regardless of whether it was previously relevant to a now-determined issue.

Decisions. LG next asks the Court to exclude the Innolux agreement and related new arguments. This appears to have been addressed by the No New Decisions: as the Innolux agreement was not admitted in the previous trial, it will not be admitted at retrial; the new evidence that LG contends Mondis would need to support a reasonable royalty theory based on the Innolux agreement is barred by the “no new evidence” decision. Mondis, in opposition, does not contend that a reasonable royalty theory based on the Innolux agreement would not be new. This is sufficient to resolve this issue.

Next, LG raises the issue of the prejudicial impact of Plaintiff’s pointing to LG’s \$10 billion in revenues from TV sales. Mondis replies that it will not mention LG’s \$10 billion in revenues from TV sales.

Next, LG asks the Court to exclude evidence of the Innolux verdict. Again, the “No New Decisions” have already resolved this: if Hansen presented a reasonable royalty theory based on the Innolux verdict at the prior trial, Mondis may rely on it at retrial.<sup>3</sup> Otherwise, Mondis will be unable to argue it at retrial because it will be new and barred.

Next, LG asks the Court to exclude Lamm’s testimony that the ‘180 patent was the “heart” of the ‘090 patent family. LG contends that Lamm’s “heart” opinion is not supported by sufficient facts or data and should be excluded under Federal Rule of Evidence 702. As Mondis argues in opposition, LG waived this argument when it failed to challenge that opinion,

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<sup>3</sup> The Court’s Daubert Order of April 11, 2019, issued as the damages phase of the prior trial began, suggests that Hansen would not present a reasonable royalty theory based on the Innolux verdict at the prior trial: “LG’s damages expert will be permitted to testify in accordance with the following opinions he presented during the March 22, 2019 hearing: (i) apportionment of the LG, TPV, and Hon Hai licenses, and (ii) apportionment based on excess sales price.” (Docket Entry No. 473 at ¶ 1.) LG argues correctly that the prior Daubert decision is also the law of the case.

stated in Lamm’s expert report, in a Daubert motion prior to the previous trial, and also when LG failed to object to the testimony at trial. The Court agrees with Mondis that LG has waived this objection.

LG’s third motion *in limine* will be granted in part and denied in part.

F. LG’s fourth motion in limine

In the fourth motion, LG asks the Court to preclude Mondis from eliciting testimony from Spiro on various subjects. These issues have been resolved by the “No New Decisions:” unless otherwise barred, Mondis may only elicit testimony from any witness that repeats that witness’s testimony from the first trial, and which is relevant to the subject of reasonable royalty damages as well as the permitted theories of a reasonable royalty. Except as otherwise provided, Mondis is barred from arguing any new reasonable royalty theory to the jury. LG’s fourth motion *in limine* will be granted in part and denied in part.

G. LG’s fifth motion in limine

LG’s motion seeks to preclude the presentation of evidence in support of new reasonable royalty theories, and argument about those new theories to the jury. The “No New Decisions” have resolved these issues. LG’s fifth motion *in limine* will be granted in part and denied in part.

For these reasons,

**IT IS** on this 10th day of January, 2023

**ORDERED** that LG’s motion *in limine* #1 (Docket Entry No. 716) is **DENIED**; and it is further

**ORDERED** that LG’s motion *in limine* #2 (Docket Entry No. 718) is **GRANTED** in part

and **DENIED** in part; and it is further

**ORDERED** that LG's motion *in limine* #3 (Docket Entry No. 720) is **GRANTED** in part and **DENIED** in part; and it is further

**ORDERED** that LG's motion *in limine* #4 (Docket Entry No. 722) is **GRANTED** in part and **DENIED** in part; and it is further

**ORDERED** that LG's motion *in limine* #5 (Docket Entry No. 724) is **GRANTED** in part and **DENIED** in part; and it is further

**ORDERED** that Mondis's motion *in limine* #1 (Docket Entry No. 726) is **GRANTED**; and it is further

**ORDERED** that Mondis's motion *in limine* #2 (Docket Entry No. 728) is **GRANTED** in part and **DENIED** in part; and it is further

**ORDERED** that Mondis's motion *in limine* #3 (Docket Entry No. 730) is **DENIED**.

s/ Stanley R. Chesler  
Stanley R. Chesler, U.S.D.J.

**UNITED STATES DISTRICT COURT  
DISTRICT OF NEW JERSEY**

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MONDIS TECHNOLOGY LTD,

Plaintiff,

v.

LG ELECTRONICS, INC.  
et al.,

Defendants.

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Civil Action No. 15-4431 (SRC)

**OPINION**

**CHESLER, U.S.D.J.**

This matter comes before the Court on three motions: 1) the motion by Defendants LG Electronics, Inc. and LG Electronics U.S.A., Inc. (collectively, “LG”) for judgment as a matter of law under Rule 50(b), a new trial under Rule 59, and/or remittitur regarding damages; 2) the motion by Plaintiff Mondis Technology Ltd (“Mondis”) for enhanced damages and attorneys’ fees, pursuant to 35 U.S.C. §§ 284 and 285; and 3) Mondis’ motion for prejudgment and postjudgment interest. For the reasons that follow, LG’s motion for judgment as a matter of law under Rule 50(b), a new trial under Rule 59, and/or remittitur regarding damages will be denied; Plaintiff’s motion for enhanced damages and attorneys’ fees, pursuant to 35 U.S.C. §§ 284 and 285, will be denied; and Plaintiff’s motion for prejudgment and postjudgment interest will be granted in part and denied in part.

This case arises from a dispute between Mondis, owner of U.S. Patent No. 7,475,180 (the “’180 patent”), and LG, a television manufacturer, over allegations that LG manufactured and sold televisions that infringed claims 14 and 15 of the ’180 patent. A jury trial was held in



April of 2019; the jury returned a verdict that claims 14 and 15 of the '180 patent were valid and infringed, and that the infringement was willful, and the jury awarded Mondis compensatory damages of \$45 million. The Court subsequently granted LG's motion to vacate the damages verdict and Ordered a re-trial on damages. The re-trial was held on February 6 and 7, 2023; the jury awarded Mondis compensatory damages of \$14.3 million. The Court now considers the parties' post-trial motions arising from the re-trial.

# **I. Mondis' motion for enhanced damages and attorneys' fees**

Mondis moves for enhanced damages, pursuant to 35 U.S.C. § 284, and a declaration that this is an exceptional case, pursuant to 35 U.S.C. § 285, with an award of attorneys' fees and costs. The Court begins its consideration of this motion with a brief review of the history of this case.

## **A. The history of the case**

In discussing the early history of this case, LG cites a summary written by Mondis in its opening brief in support of its *in limine* motions before the first trial. It is a helpful summary of the early history of the case:

As noted above, Mondis and LG have a long history litigating the '180 patent and related DDC patents. In 2007, Mondis sued LG and other defendants in the 565 Case for infringement of DDC patents 6,057,812 ("812 patent"), 6,247,090 ("090 patent"), 6,304,236 ("236 patent"), 6,513,088 ("088 patent"), 6,549,970 ("970 patent"), 6,639,588 ("588 patent"), and 6,686,895 ("895 patent"), later adding patents 7,089,342 ("342 patent"), 7,475,181 ("181 patent") and the '180 patent. After LG settled the case with a more-than-\$8 million license, trial proceeded to verdict against Innolux on June 27, 2011. Ex. 11 (verdict sheet). The jury found that Innolux infringed all of the claims of the '180 patent asserted in this case, and infringed all asserted claims of the '342 patent, '812 patent, and '588 patents, as well as one of the three asserted '090 patent claims. The jury also found all these infringed claims to be valid. However, the jury found none of the '088 and '970 patent claims infringed, and found invalid all of the '090, '088 and '970 patent claims that it also found uninfringed. Ex. 11.

Between the time of the 2011 trial in the 565 case and 2014, Mondis tried to negotiate a DDC patent license with LG for its televisions. When that effort failed, Mondis filed this lawsuit on June 21, 2014, in Texas for infringement of the then-expired '180, '088, '970, '588 and '342 patents. About a month earlier, LG launched a campaign of what became serial ex parte reexaminations to invalidate the asserted patents. See D.I. 86 at 3. During reexamination the patent office rejected claims to all of the patents, although eventually, it confirmed claims 14-16 of the '180 patent. With the other asserted patents expired, Mondis chose to forego its still-substantial appeal rights, and move forward expeditiously with the confirmed claims of the '180 patent, to avoid further delay.

(Docket Entry No. 331 at 24-25.) In this Opinion, this Court refers to the case which went to a jury verdict in the District Court for the Eastern District of Texas as the “Texas Case,” to distinguish it from the instant case which, though filed in that same district, was transferred to the District of New Jersey and has gone to trial here twice (the “First Trial” and the “Re-trial.”)

The Mondis MIL summary lays out much of the relevant background history, but a few points need to be added. When Mondis filed the complaint in 2007 that began the Texas Case, the claims concerned only computer monitors which were alleged to infringe based on their use of “Plug and Play” technology (also referred to as “DDC” or “DDC2B” technology.) (Texas Case complaint, Docket Entry No. 1, December 31, 2007.)<sup>1</sup> In the original complaint, Mondis filed suit against three manufacturers of computer monitors, LG, Hon Hai, and Innolux. (*Id.*)

Thus, when Mondis filed its first patent infringement suit against LG, the complaint did not allege that LG televisions infringed its patents, nor did it mention the '180 patent, which had not yet issued. At the first trial in the instant case, Mr. Alessi, former Director of Product Development for LG, testified that LG sold televisions with HDMI<sup>2</sup> ports as early as the 2005

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<sup>1</sup> The Court takes judicial notice under Rule 201 of the public record from that litigation, *Mondis v. Innolux et al.*, Civil Action No. 07-565 JRG (E.D.Tx. 2007.)

<sup>2</sup> HDMI ports use the '180 patent's technology. (Pl.'s Trial Brief (1<sup>st</sup>) at 4 (“use of HDMI inputs

model year. (First Trial Tr. 721:4-7.) The '180 patent issued on January 6, 2009. On March 9, 2009, Mondis filed the first amended complaint in the Texas Case and added claims for infringement of the '180 patent by monitors; the claims did not yet target televisions. (Texas Case Docket Entry No. 103.) At the first trial in the instant case, Mr. Spiro, Director of Mondis, testified that Mondis first raised the issue of infringement by LG televisions at a meeting with LG in April of 2009.<sup>3</sup> (First Trial Tr. 114:20-117:22; 195:1-17.) Spiro also testified that LG and Mondis settled the Texas Case in principle in May of 2009, and the settlement was finalized in September of 2009. (First Trial Tr. 118:19-119:16.) LG was dismissed from the Texas Case on consent on September 17, 2009. (Texas Case Docket Entry No. 135.) Spiro testified that, pursuant to the settlement agreement, LG purchased a license to use the DDC patents in monitors; "about 8.85 million was paid when the license was signed and then over time another 400,000 was paid further." (First Trial Tr. 111:22-23.)

On January 15, 2010, Mondis filed the third amended complaint in the Texas Case, adding claims that televisions sold by the remaining defendants infringed the '090, '088, '970, '342, and '180 patents. (Texas Case Docket Entry No. 153.) As already described, the Texas Case went to trial, with the jury finding that the asserted claims of the '180 patent were valid and infringed by the televisions of defendant Innolux, and awarding damages. Spiro testified that Innolux appealed the verdict but ultimately settled with Mondis for the full amount of the verdict.<sup>4</sup> (First Trial Tr. 990:9-15.)

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results in practicing the '180 patent because the HDMI specification incorporates and utilizes the above described VESA and I2C standards.”))

<sup>3</sup> The parties stipulated that the damages period ran from April 2, 2009 to February 3, 2014. (Docket Entry No. 469.)

<sup>4</sup> Bratic's expert report, dated February 5, 2018, states a date of March 5, 2013 for the

The '180 patent expired on February 3, 2014. As stated in the Mondis MIL summary, in May of 2014, LG filed the first of a series of reexamination requests with the PTO for the patents at issue. The following month, Mondis filed the instant suit for infringement of the '180, '088, '970, '588 and '342 patents. During reexamination, the PTO rejected all claims in the '088, '970, '588 and '342 patents. During reexamination of the '180 patent, the PTO issued an initial office action rejecting the claims at issue in the '180 patent, claims 14-16, but ultimately reversed course and affirmed claims 14-16;<sup>5</sup> the remaining claims of the '180 patent were rejected on reexamination.

Having reviewed the history of this case, the Court proceeds to consider the motion for an award of enhanced damages, pursuant to 35 U.S.C. § 284, which states: “the court may increase the damages up to three times the amount found or assessed.” When considering a motion for

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Mondis/Innolux settlement agreement. (Docket Entry No. 639 Ex. 2 at ¶ 113.)

<sup>5</sup> On June 30, 2015, the PTO issued a final Office Action in Ex Parte Reexamination that confirmed claims 14-16 of the '180 patent, while rejecting other claims from that patent. (Docket Entry No. 86 Ex. B at 16 (page numbers for Exhibit B are based on the Court's numbering, not the PTO's.)) In the accompanying explanation, the PTO recited the full reexamination history of the '180 patent, which had first been challenged in June of 2009. (*Id.* at 18.) On October 6, 2009, the PTO issued a First Action on the Merits with claims 1-16 and 21-29 under rejection. (*Id.* at 19.) On October 14, 2011, the PTO issued an Action Closing Prosecution which maintained these rejections. (*Id.* at 20.) On April 11, 2014, however, this first reexamination of claims 14-16, and others, was dismissed. (*Id.* at 21.) Nonetheless, the reexamination of claims 14-16 continued in two other reexaminations, which were merged. (*Id.* at 22.) On March 9, 2015, the PTO issued another First Action on the Merits that rejected claims 14-20, and others. (*Id.* at 22.) In this merged reexamination, in the Final Office Action dated June 30, 2015, the PTO then reversed course with regard to claims 14-16, based on the patent owner's arguments. The PTO explained, in short, that it agreed that the Schmidt reference did not disclose certain elements of claims 14-16, and it withdrew the rejection of these claims. (*Id.* at 36.) The PTO also explained that it disagreed with the other four arguments of the patent owner about claims 14-16 and the Schmidt reference. (*Id.* at 35-39.) One argument had succeeded, however, and claims 14-16 were confirmed in the final Office Action of June 2015. (*Id.* at 46.)

enhanced damages under § 284, the Court applies the principles set forth by the Supreme Court in Halo:

Section 284 gives district courts the discretion to award enhanced damages against those guilty of patent infringement. In applying this discretion, district courts are “to be guided by [the] sound legal principles” developed over nearly two centuries of application and interpretation of the Patent Act. Those principles channel the exercise of discretion, limiting the award of enhanced damages to egregious cases of misconduct beyond typical infringement.

Halo Elecs., Inc. v. Pulse Elecs., Inc., 579 U.S. 93, 110 (2016) (citation omitted.) Prior to the Halo decision, Federal Circuit law required courts considering an award of enhanced damages to weigh the nine factors stated in Read Corp. v. Portec, Inc., 970 F.2d 816, 827 (Fed. Cir. 1992). Following the Halo decision, the Federal Circuit no longer requires consideration of the Read factors:

[T]he district court is not required to discuss the *Read* factors. . . . The *Halo* test merely requires the district court to consider the particular circumstances of the case to determine whether it is egregious.

Presidio Components, Inc. v. Am. Tech. Ceramics Corp., 875 F.3d 1369, 1382-83 (Fed. Cir. 2017). Here, Mondis has used the Read framework to argue for enhanced damages. In light of this, the Court will begin by considering Plaintiff’s application of Read to the issue of enhanced damages.

B. Mondis contends that the Read factors support an award of enhanced damages

As to the first Read factor, copying, the jury determined that LG willfully infringed the claims at issue; Mondis contends that this clearly demonstrates that LG copied its designs. LG argues, in opposition, that it began use of DDC2B technology prior to the issuance of the ’180 patent. The parties did not litigate the question of when LG began to incorporate DDC2B technology into the designs of its televisions, nor how it developed its DDC2B designs, and so

the Court cannot now determine whether LG did in fact deliberately copy a Mondis or Hitachi design or arrived at the infringing design by some other route.<sup>6</sup> Mondis cites no evidence that LG copied anything directly from Mondis or Hitachi.

In any case, the ultimate issue is whether Mondis has demonstrated that LG engaged in “egregious [] misconduct beyond typical infringement.” Halo, 579 U.S. at 110. While the jury determined that LG’s infringement was willful, and thus beyond typical infringement, Mondis has not pointed to circumstances that evidence egregious misconduct – conduct that is malicious or characteristic of a pirate. The Court concludes that the first Read factor reflects the willfulness finding, but does not do more to tip the balance toward a finding of egregious misconduct.

The second Read factor asks “whether the infringer, when he knew of the other’s patent protection, investigated the scope of the patent and formed a good-faith belief that it was invalid or that it was not infringed.” Read, 970 F.2d at 827. It is undisputed that Mondis informed LG about the ’180 patent at the start of the period of infringement. Mondis argues, in essence, that this Court should make an adverse inference against LG because LG has not offered evidence of if or when it formed such a good-faith belief. This Court declines to make an adverse inference.

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<sup>6</sup>It is undisputed that the Video Electronics Standards Association (VESA) established a standard that used DDC2B technology, and that this occurred prior to the issuance of the ’180 patent. As already stated, the parties did not litigate the origins of LG’s infringing designs, but this case appears to present a situation in which LG began use of DDC2B technology before the patent was issued, the television manufacturing industry adopted a standard which required use of DDC2B technology before the patent was issued, and the period of infringement began later, after the patent issued. No evidence was presented that demonstrates that LG began use of the DDC2B technology with knowledge that the technology was the intellectual property of Hitachi. Mondis did not establish that LG began use in circumstances indicative of piracy or malicious intent.

Mondis has pointed to no evidence about LG’s investigation of the scope of the patent nor whether LG had a good-faith belief that the ’180 patent was invalid or not infringed.

The third Read factor concerns the infringer’s behavior as a party to the litigation. Mondis contends that LG worked to prolong the litigation, asserted meritless positions, filed duplicative motions, and made improper arguments to the jury. As LG argues in opposition, this case did not begin until several months after the expiration of the ’180 patent, which ended the period of infringement. Even if Mondis had support for its allegations of litigation misconduct, it would need to persuade the Court that there is a nexus between such conduct and the “egregious infringement behavior” that Halo recognized as essential for enhancement of damages under § 284.<sup>7</sup> Mondis has given the Court no reason to consider LG’s post-infringement conduct of the litigation as “infringement behavior.” LG also cites Spectralytics, Inc. v. Cordis Corp., 649 F.3d 1336, 1349 (Fed. Cir. 2011): “attorney misconduct or other aggravation of the litigation process may weigh heavily with respect to attorney fees, but not for enhancement of damages.”

Furthermore, even if Mondis had persuaded the Court that LG’s post-infringement litigation conduct should be considered “infringement behavior,” the Court does not agree that LG’s conduct of the litigation has been egregious. This case has been hard-fought by determined adversaries, and neither side distinguished itself as either virtuous or malicious. The third Read factor, LG’s behavior as a party to the litigation, is neutral.

As for the fourth Read factor, LG’s size and financial condition, Mondis argues only that

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<sup>7</sup> The Supreme Court stated: “enhanced damages under the Patent Act . . . are not to be meted out in a typical infringement case, but are instead designed as a ‘punitive’ or ‘vindictive’ sanction for egregious infringement behavior.” Halo, 579 U.S. at 103.

LG is capable of paying an enhanced verdict. LG responds that this is an immaterial consideration. The Court is not persuaded that, in this case, LG's size and financial stability weigh for or against a finding of egregious infringement behavior.

The fifth Read factor is the closeness of the case.<sup>8</sup> Mondis argues that it "prevailed on every major event in the case up through trial." (Pl.'s Br. at 25.) Mondis also contends, on various grounds, that LG's defenses were weak. LG, in opposition, begins by pointing to the decimation of Plaintiff's case during reexamination at the USPTO. The Mondis MIL summary, quoted above, establishes this: in the original Complaint filed by Mondis that initiated this case, it asserted infringement of five patents, the '180, '088, '970, '588 and '342 patents. These patents were reexamined by the USPTO and, as Mondis concedes, there was a point in the reexamination process in which every claim of every patent was rejected. Ultimately, Mondis persuaded the PTO to change its view of the contents of the Schmidt reference, and only claims 14-16 of the '180 patent were confirmed. (Final Office Action in Ex Parte Reexamination, dated June 30, 2015, at 21, Ex. B to Walsh Letter of July 24, 2015, Docket Entry No. 86.) Three claims survived reexamination, but four patents and all the other claims of the '180 patent did

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<sup>8</sup> Mondis, in reply, argues that Read factor 5 considers only the issues actually tried, but cites no Federal Circuit authority in support of this position. The Federal Circuit's decision in Funai runs contrary to Plaintiff's contention: the Federal Circuit reviewed the district court's analysis of this factor and found no abuse of discretion, noting that the district court had considered a party's success on three pre-trial motions. Funai Elec. Co., Ltd. v. Daewoo Elecs. Corp., 616 F.3d 1357, 1377 (Fed. Cir. 2010). The fifth Read factor says "case," not "trial." The instant case began with five valid patents and the subsequent rejection on reexamination of so many claims is an objective indicator of the closeness of the case. Moreover, even if Mondis is correct that "case" in Read means "trial," the case presented at trial was close enough that the Court would not agree that LG was in a very weak position at trial. Finally, inasmuch as Halo held that a district court should exercise its discretion to award enhanced damages, and "we eschew any rigid formula for awarding enhanced damages under §284," the Read factors no longer constrain the inquiry. 579 U.S. at 107.



not. The reexamination history provides an objective indicator of the closeness of this case: it has been a close case, as demonstrated by the undisputed fact that, at one point in time, all claims at issue were rejected by the PTO during reexamination.

The Court also agrees with LG that it presented substantial defenses to the claims of infringement for the 3 claims that did survive reexamination. Although the jury was ultimately not persuaded by LG's invalidity defense of lack of written description, and its non-infringement defenses about the communication controller and the identification number, they were colorable positions. In particular, the issue about the presence of the identification number was a hotly contested and close one, as evidenced by the oral argument between the parties at the end of day 1 and the start of day 2 of trial. (First Trial Tr. 138-152; 156-172.) Although the jury was not, in the end, persuaded by LG's evidence and argument that the part of the Feature Support Byte in question did not actually identify anything, and therefore was not an identification number, it was a viable enough argument that Mondis worked hard to convince the Court to bar Dr. Stevenson's testimony about his experiments. (Id.) As the Court stated at the end of the parties' argument on day 2: "it's the Court's opinion that the evidence that manipulating these bits has no impact may very well be relevant to the jury's determination as to whether or not this is an identification number or not within the meaning of the claim." (First Trial Tr. 172:2-7.) Had the jury been persuaded by LG on this point, it could not have made a finding of infringement, and LG would have won the case.

As to the sixth and seventh Read factors, the facts are clear. As to the duration of the misconduct, the sixth factor, there is no dispute that LG infringed for the life of the patent, with notice of the patent for most of that time. As to remedial action by the defendant, the seventh

factor, it is undisputed that LG took none. The question is the significance of these facts, to be discussed further below.

As to the eighth Read factor, Defendant's motivation for harm, Mondis offers a few paragraphs which cite to no evidence that LG demonstrated a motivation to harm Mondis or Hitachi. As already noted, the parties did not litigate the question of the origin of LG's infringing design.

As to the ninth Read factor, whether Defendant attempted to conceal its misconduct, Mondis argues that LG, during the course of litigation, attempted to shield a portion of infringing television sales from discovery. Both Plaintiff's moving brief and LG's opposition brief offer little clarity on this discovery dispute that, Mondis agrees, was resolved before trial. The most that this Court can say, based on the briefs, is that Mondis has cited no evidence that tends to show that it is more likely than not that LG actually concealed particular sales data from discovery. Plaintiff's brief offers rhetoric, but not evidence of discovery misconduct worthy of punishment. For example, as evidence, Mondis offers a draft of a letter, dated December 1, 2016, from (LG counsel) Edwards to Magistrate Judge Waldor, describing the discovery dispute. (Goldberg Dec. Ex. 15.) The draft letter includes descriptions of Plaintiff's understanding of LG's position on various relevant issues, and it described LG as taking the position that Mondis should specifically identify by model number each model for which it sought sales data. (See, e.g., id. at 4 ("LG asserted that it was Mondis' burden, not LG's, to determine from public sources all the models that LG sold in the U.S. during the damages period, and whether they had the infringing features.")) Mondis also offers the letter, dated April 19, 2017, from (LG counsel) Beaber to (Mondis counsel) Edwards on this subject. (Goldberg Dec. Ex. 36.) In that letter,

counsel for LG explains that LG's sales database does not track which models contain an HDMI port. (Id. at 1.) There appears to have been a dispute between the parties about whose job it was to figure out which television models contained HDMI ports. (See, e.g., id. at 2.)

These letters show the parties working toward resolution of a discovery dispute, and do not support the contention that LG deliberately concealed sales data. Mondis has not persuaded the Court that LG deliberately concealed sales data on infringing televisions. In light of the fact that it is undisputed that, during the infringement period, LG advertised and sold its televisions to the public, and that Plug and Play functionality was promoted as a feature, the evidence suggests that LG did not attempt to conceal its infringement of the '180 patent.

Lastly, Mondis points to LG's conduct during pre-litigation license negotiations which, it contends, demonstrates a pattern of bad faith and dishonesty. Yet the thread that runs through Plaintiff's brief review of the negotiation history is that LG agreed to pay for a license for its computer monitors but did not agree to pay for a license for its televisions. This is not evidence of egregious infringement misconduct. To the contrary, the fact that LG paid Mondis for a license for use of the technology in monitors weighs against viewing LG as a pirate.

The Court has considered Plaintiff's arguments in favor of enhancement of infringement damages, pursuant to § 284. The Court is satisfied that viewing Mondis' arguments under the Read approach hardly makes a compelling case for enhanced damages. The Court proceeds to consider the motion under the more generalized Halo approach, and likewise concludes that Mondis has failed to demonstrate that enhanced damages are warranted.

In Halo, the Supreme Court summarized the standard as follows: "Awards of enhanced damages under the Patent Act over the past 180 years establish that they are not to be meted out

in a typical infringement case, but are instead designed as a ‘punitive’ or ‘vindictive’ sanction for egregious infringement behavior.” 579 U.S. at 103. Mondis argues: “The Read and other pertinent factors support enhancement.” (Pl.’s Br. at 13.) Mondis has not, however, cited evidence from which this Court concludes that it is more likely than not that LG’s infringement behavior was egregious, within the meaning of Halo. The evidence cited by Mondis supports the jury’s verdict that LG’s infringement was willful: the evidence supports inferences that, during the period of infringement, LG knew about the ’180 patent, knew that Mondis believed that LG’s televisions infringed the ’180 patent, and infringed.

A finding of willfulness alone does not provide sufficient basis for enhancement of damages. The Federal Circuit has stated:

[A]n award of enhanced damages does not necessarily flow from a willfulness finding. Discretion remains with the court to determine whether the conduct is sufficiently egregious to warrant enhanced damages.

Presidio Components, Inc. v. Am. Tech. Ceramics Corp., 875 F.3d 1369, 1382 (Fed. Cir. 2017) (citations omitted); see also Halo, 579 U.S. at 105 (“The subjective willfulness of a patent infringer, intentional or knowing, *may* warrant enhanced damages”) (italics added). Mondis has demonstrated that LG’s infringement conduct was willful, but not that it was sufficiently egregious to warrant enhanced damages.

Having considered the particular circumstances of this case, the Court finds scant evidence to support a finding that LG’s infringement conduct was egregious, within the meaning of Halo: “willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant, or—indeed—characteristic of a pirate.” 579 U.S. at 103-04. Instead, the Court finds that, considering all the circumstances of this case, LG’s infringement conduct was not egregious.

One circumstance that weighs strongly against the view of LG as a pirate is that LG licensed the DDC2B technology for use in its computer monitors, paying Mondis almost \$9 million for that license, plus running royalties. This is not the conduct of a pirate.

Nor does the history otherwise support the conclusion that LG's infringement conduct was egregious. No evidence has been presented that demonstrates that LG in fact copied any element of its televisions from Mondis or Hitachi; there is no dispute that the DDC2B technology had been incorporated into a VESA standard that many television manufacturers incorporated into their products, well before Mondis filed suit in 2007 against LG and other manufacturers in Texas with regard to computer monitors. For the majority of the period of infringement, the claims at issue were under rejection during reexamination at the PTO.<sup>9</sup>

For purposes of deciding the motion for enhanced damages, it is sufficient to determine that Mondis has not demonstrated that, considering all the circumstances of the case, it is more likely than not that LG's conduct as an infringer was egregious. The Court is not tasked with determining whether LG's conduct as an infringer was reasonable, yet it is not difficult to see LG's conduct during the period of infringement as consistent with a reasonable belief that LG's televisions did not infringe any valid patent. The key historical facts which support this view have been discussed with regard to the fifth Read factor, the closeness of the case. LG has contended in this case that its televisions do not infringe any valid patents, and the results of the USPTO reexamination show not only that this contention was proven largely correct, but that

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<sup>9</sup> As previously stated, the history of the reexamination of the '180 patent shows that, on October 6, 2009, the PTO issued a First Action on the Merits with claims 14 and 15, the claims presently at issue, under rejection. Until this reexamination was dismissed on April 11, 2014, the PTO had not reversed or modified the initial rejection of claims 14 and 15.

Mondis came quite close to having all the patents at issue invalidated. Viewed in hindsight and in the context of these historical facts, it is not difficult to see LG's infringement conduct as consistent with a reasonable belief of no infringement of any valid patent.

In Halo, the Supreme Court exemplified “the most culpable offender[] . . . as the ‘wanton and malicious pirate’ who intentionally infringes another’s patent—with no doubts about its validity or any notion of a defense—for no purpose other than to steal the patentee’s business.” 579 U.S. at 104. This is a very helpful example of egregious infringement conduct, and the evidence of record supports the conclusion that LG’s infringement conduct differed greatly from this extreme case. First, Mondis does not contend that LG sought to steal its licensing business, or that LG sought to steal Hitachi’s television business. There is no evidence about how LG came to use DDC2B technology in its televisions, and thus no evidence that LG copied anything from Mondis or Hitachi (rather than the VESA standard). Rather, LG purchased from Mondis a license for use of the technology in monitors, the total opposite of theft.

In arguing for enhanced damages, Mondis contends that LG has offered no exculpatory evidence that would show a good faith belief in non-infringement or patent invalidity, but that shifts the burden of proof off of Mondis. On this motion for enhanced damages, Mondis bears the burden of proof of LG’s egregious infringement conduct, and Mondis has offered no evidence that LG believed that the ’180 patent was valid and that LG’s televisions infringed. To the contrary, the evidence shows that, for the majority of the period of infringement, the claims at issue were under rejection during reexamination at the PTO. After the expiration of the ’180 patent in 2014, and after the PTO dismissed a pending reexamination of the ’180 patent, LG quickly challenged the validity of the ’180 patent and other patents in the ’090 family by

requesting reexamination. Mondis admits that in one period during reexamination, all claims of all patents at issue had been rejected by the USPTO. This is not evidence of LG's beliefs or motives during the period of infringement, but it still weighs against a conclusion that LG's conduct was egregious. Although LG's requests for reexamination occurred after the expiration of the '180 patent, this is circumstantial evidence that LG had doubts about the validity of the patents, and that these doubts were largely proven to be justified. Mondis has offered no evidence that LG believed that its televisions infringed any valid patents.

Considering the totality of the circumstances, the Court finds that Mondis has failed to prove, by a preponderance of the evidence, that LG's infringement conduct was anywhere close to the example of egregious misconduct provided by the Supreme Court in Halo. Mondis has not persuaded the Court that LG's conduct as an infringer, though willful, is sufficiently culpable as to deserve punishment, pursuant to 35 U.S.C. § 284.

C. Plaintiff's motion to declare this an exceptional case

Mondis argues that the Court should declare this to be an exceptional case, pursuant to § 285, on four grounds:

(1) to give life to the jury's finding of willfulness, (2) because of the unreasonableness of LG's positions and litigation conduct, (3) to ensure proper compensation to Mondis for the lengthy path to trial, and (4) to deter LG and others from acting similarly in future cases.

(Pl.'s Br. at 35.) The Supreme Court has held:

[A]n "exceptional" case is simply one that stands out from others with respect to the substantive strength of a party's litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated. District courts may determine whether a case is "exceptional" in the case-by-case exercise of their discretion, considering the totality of the circumstances. As in the comparable context of the Copyright Act, there is no precise rule or formula for making these determinations, but instead equitable

discretion should be exercised in light of the considerations we have identified.

Octane Fitness, LLC v. ICON Health & Fitness, Inc., 572 U.S. 545, 554 (2014).

As to the first element cited by Plaintiff, the jury's finding of willfulness, in opposition, LG cites Sionyx LLC v. Hamamatsu Photonics K.K., 981 F.3d 1339, 1355 (Fed. Cir. 2020), in which the Federal Circuit stated: "While willfulness is among the reasons that a court may find a case to be exceptional, an attorney fee award is not mandatory when willful infringement has been found." Mondis does not argue that the willfulness finding reflects the substantive strength of its litigating position or unreasonableness in the manner in which the case was litigated, and thus has failed to connect the willfulness verdict in this case to the Octane standard.

As to the second element cited by Plaintiff, the unreasonableness of LG's positions and litigation conduct, the Court has addressed these issues in its discussion of the Read factors. This has been a close case and neither party has shown a striking imbalance, or advantage, in the relative strength or weakness of its substantive litigating positions.

As to the third element, to ensure that Mondis receives proper compensation, Octane does not reference that as a policy goal of § 285. While Octane does include a footnote to a case under the Copyright Act in which compensation and deterrence goals were relevant, the Supreme Court's discussion about § 285 focuses on the losing party's position in and conduct of the litigation, not compensation for the winner. 572 U.S. at 554 n.6. The same is true for Plaintiff's fourth element, deterrence: Octane does not state that the exceptional case analysis should incorporate deterrence considerations.

In opposition, LG argues that Mondis does not deserve a fee award, given its own litigation misconduct, citing Power Mosfet Techs., L.L.C. v. Siemens AG, 378 F.3d 1396, 1415



(Fed. Cir. 2004): “A party subjected to behavior warranting an award of sanctions or fees might justifiably be denied those fees in a district court’s discretion for the behavior to which it subjected others.” LG points to the chapter of this litigation involving Bratic’s supplemental report.

In brief, this chapter begins with the Court’s Opinion and Order of April 22, 2020, which granted LG’s motion for a new trial, and stated:

This Court grants LG’s motion for a new trial, subject to the following limitations. At the new trial, the parties may not offer evidence that was not presented at the previous trial, with one potential exception: should Mondis seek to offer the expert testimony of Mr. Bratic, based solely on the evidence presented at the previous trial, Mondis may submit an updated expert report, which this Court will consider in a Daubert hearing. All expert testimony must reflect the Federal Circuit law on apportionment, as discussed in the Court’s Opinion in which it vacated the jury damages verdict.

(Opinion and Order of April 22, 2020 at 9.) In June of 2020, Mondis submitted to LG two new expert reports, one from Bratic and one from Lamm. (See Docket Entry No. 635 at 1.) A chapter of the litigation ensued in which LG moved to strike both expert reports. Several rounds of motions followed in which the Court struck the new Lamm report and parts of the new Bratic report. This chapter ended in September of 2021, when the Court granted LG’s motion to exclude what remained of the new Bratic report under Rule 702.

The details of what happened during this chapter are described at length in the Court’s Opinions and Orders dated July 15, 2020, August 15, 2020, August 18, 2020, October 2, 2020, November 6, 2020, and September 8, 2021. The long story short is that Mondis was responsible for the waste of a considerable amount of time. See Mondis Tech. Ltd. v. LG Elecs., Inc., 2020 U.S. Dist. LEXIS 208019, at \*4-5 (D.N.J. Nov. 6, 2020) (“This Court has now before it the fourth round of briefing which has resulted from Plaintiffs’ flagrant disregard of the Opinion &

Order of April 22, 2020. This Court is now presented with two motions for reconsideration after having been required to minutely parse the Bratic Supplement for compliance with the Court's Orders. The Court is tired of this nonsense . . .”)

At the end of this chapter, in the Daubert Opinion, this Court stated: “This Court agrees with LG that ‘Mr. Bratic has squandered his second opportunity to present a legally permissible damages theory.’” (Opinion and Order of September 8, 2021 at 29.) The Court’s concern now, however, is not with Mr. Bratic, but with the amount of wasted time and effort that were required to get to that conclusion. Mondis had persistent difficulty complying with the simple restriction that the Court imposed in the Opinion and Order of April 22, 2020, when it granted LG’s motion for a new trial: no new evidence. Time was also wasted by Mondis as Plaintiff offered and defended reasonable royalty theories that, the Court concluded, were new versions of the threshold theory that the Court had held to be in violation of the Federal Circuit law of apportionment. Mondis Tech. Ltd v. LG Elecs., Inc., 407 F. Supp. 3d 482, 501 (D.N.J. 2019).

This Court finds that Mondis has not persuaded that it is entitled to an “exceptional case” declaration and an award of attorney fees, pursuant to § 285. This is so without consideration of the chapter of the litigation involving the revised expert reports. As already discussed, this Court does not consider either party to this case to have had, overall, an exceptionally strong or weak litigation position, nor to have litigated this case in an exceptionally unreasonable manner, overall. LG does have a point, however, when it cites Mosfet and urges the Court to consider Mondis’ own conduct in the litigation: as to the issue of litigation misconduct, what comes closest to standing out to the Court as “exceptional” in this case was the chapter in which Mondis struggled to comply with the Opinion and Order of April 22, 2020 – not misconduct by LG.

Pursuant to Octane, Plaintiff's motion for a declaration that this case is exceptional will be denied.

## **II. Mondis' motion for prejudgment and postjudgment interest**

Pursuant to § 284, Mondis seeks roughly \$8 million in prejudgment interest on the damages award. LG, in opposition, argues that an award of prejudgment interest should be withheld in its entirety because Mondis was not diligent in prosecuting this case.

Section 284 states:

Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

35 U.S.C. § 284. The Supreme Court has held: "Prejudgment interest should be awarded under § 284 absent some justification for withholding such an award." GM Corp. v. Devex Corp., 461 U.S. 648, 657 (1983).

The parties agree that an award of prejudgment interest is a matter entrusted to the Court's discretion. Plaintiff's moving brief, on the whole, cites Federal Circuit law in arguing for prejudgment interest. LG, in opposition, argues that the Federal Circuit applies regional circuit law to this issue. See Sulzer Textil A.G. v. Picanol N.V., 358 F.3d 1356, 1362-63 (Fed. Cir. 2004) ("We answer this question on an issue by issue basis and will apply the law of the regional circuit to which district court appeals normally lie, unless the issue pertains to or is unique to patent law.") LG contends that the Third Circuit applies the four-factor test stated in Feather v. United Mine Workers, 711 F.2d 530, 540 (3d Cir. 1983.) Mondis, in reply, does not disagree, but contends that it is entitled to prejudgment interest under the Feather standard, too.

The issue of which circuit's law to apply has no material impact on this Court's

discretionary decision to award prejudgment interest. Mondis and LG do not disagree on the principle that, in the appropriate case, a court has the discretion to reduce or withhold an award of prejudgment interest based on a finding of pre-suit delay;<sup>10</sup> the question now is whether this Court should do so. LG argues for a reduction in prejudgment interest on two independent bases: 1) delay in filing this case; and 2) delays during litigation. The Court declines to reduce the award of prejudgment interest on the basis of delays during the litigation, once commenced; both parties contributed to the pace of events during the litigation and the Court sees no equitable basis for reducing the award of prejudgment interest to Mondis on this ground.

As to the delay in filing the case, as a factual matter, it is undisputed that Mondis accused LG of infringing the '180 patent with its televisions in 2009, but did not file suit until 2014, after the patent had expired. Mondis delayed filing this suit for five years. The only significant

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<sup>10</sup> In Kaufman v. Microsoft Corp., 34 F.4th 1360, 1374-75 (Fed. Cir. 2022), the Federal Circuit stated:

The Court added, however, that because interest is “fixed by the court,” a district court has some discretion to decide whether to award prejudgment interest, and “it may be appropriate to limit prejudgment interest, or perhaps even to deny it altogether, where the patent owner has been responsible for undue delay in prosecuting the lawsuit,” among other potential, unnamed circumstances. . . . [T]o show that delay was undue, a defendant must, at least generally, show that it was prejudiced.

In Feather v. United Mine Workers, 711 F.2d 530, 540 (3d Cir. 1983), the Third Circuit stated:

[A] district court is to consider four factors in determining whether an award of prejudgment interest is appropriate:

- (1) whether the claimant has been less than diligent in prosecuting the action;
- (2) whether the defendant has been unjustly enriched;
- (3) whether an award would be compensatory; and
- (4) whether countervailing equitable considerations militate against a surcharge.

dispute is about whether this delay justifies reducing or withholding the award of prejudgment interest.

The Court concludes that the circumstances of this case justify reducing the award of prejudgment interest because of the 5-year delay in filing. It is clear that Mondis could have filed the case in 2009; Mondis initiated litigation for infringement by televisions of the '180 patent in the Texas Case against other manufacturers in 2009. This Court is persuaded that Mondis chose not to file suit against LG in 2009 as a calculated, strategic decision; the circumstances support the inference that Mondis waited until the Texas Case had been fully resolved, as it was by settlement in 2013, before filing suit.<sup>11</sup> These circumstances also support the inference that Mondis waited until it had sufficient certainty about the likely outcome of television infringement litigation against LG, before filing suit. In June of 2014, Mondis filed this case. In hindsight, given the outcome of the USPTO reexamination of the asserted DDC2B patents, to the extent that Mondis delayed filing out of uncertainty about the case against LG, there was reason for uncertainty.

The Court finds that, considering the circumstances of this case, it would not be equitable to award Mondis prejudgment interest for the period in which it chose to delay filing. Mondis delayed filing for strategic reasons, and it would not be fair to make LG pay prejudgment interest

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<sup>11</sup> It is not clear exactly when in 2013 the Innolux settlement was executed. LG, in its brief in opposition to the motion for prejudgment interest, states that the settlement occurred in December of 2013. (Def.'s Opp. Br. re: Interest at 10.) Bratic's expert report, dated February 5, 2018, states a date of March 5, 2013 for the Mondis/Innolux settlement agreement. (Docket Entry No. 639 Ex. 2 at ¶ 113.) In the First Trial, Spiro testified that negotiations restarted in December 2013 after the Innolux settlement, but did not state the date the Innolux settlement was executed. (First Trial Tr. 997:4-6.)

for a period in which Mondis delayed filing for its own strategic benefit. Mondis was absolutely entitled to delay the filing of the case, but LG should not be made to compensate Plaintiff for a strategic decision made for Plaintiff's own benefit. As in Crystal Semiconductor Corp. v. Tritech Microelectronics Int'l, Inc., 246 F.3d 1336, 1362 (Fed. Cir. 2001), the delay was a litigation tactic that prejudiced LG. Mondis is awarded prejudgment interest running from the day it filed this case.

The parties also contest the interest rate and the frequency of compounding. Mondis asks for use of the prime rate, compounded quarterly. LG asks for use of the Treasury Bill rate, with simple interest, no compounding. LG argues that Mondis has made no demonstration of actual damages it suffered as a result of not having the royalty payment from LG in 2014, or earlier, such as interest costs on loans. It is undisputed that Mondis has no employees and is a non-practicing entity. In the absence of a demonstration that Mondis actually suffered increased damages related to the disparity between Treasury Bill rates and commercial interest rates, such as having actually paid to borrow money at commercial interest rates, the Court declines to award prejudgment interest at the prime rate. Laitram Corp. v. NEC Corp., 115 F.3d 947, 955 (Fed. Cir. 1997) (affirming district court's award of prejudgment interest at Treasury Bill rate based on absence of evidence of actual costs at a higher rate.) The award of prejudgment interest is at the Treasury Bill rate, the same rate referenced in the postjudgment interest statute, 28 U.S.C. § 1961(a). Similarly, in the absence of any demonstration that Mondis is entitled to quarterly compounding of interest, rather than simple interest, prejudgment interest will be calculated as simple interest.

The parties agree that the award of postjudgment interest is set by statute, 28 U.S.C. §

1961(a). Postjudgment interest is awarded in conformity with the statutory requirement.

### **III. LG's motion for judgment as a matter of law, a new trial, and remittitur**

LG moves for judgment as a matter of law, a new trial, and/or remittitur. LG's moving brief spends no time on supporting the motion for a new trial. Under Third Circuit law:

While a court may grant a new trial under Rule 59 'for any reason for which a new trial has heretofore been granted in an action at law in federal court,' Fed. R. Civ. P. 59(a)(1)(A), it should do so only when 'the great weight of the evidence cuts against the verdict and . . . [ ] a miscarriage of justice would result if the verdict were to stand.'

Leonard v. Stemtech Int'l, Inc., 834 F.3d 376, 386 (3d Cir. 2016). LG offers no arguments of any substance that the great weight of the evidence cuts against the verdict or that a miscarriage of justice would result if the verdict were to stand. There is no basis to grant the motion for a new trial.

As to the motion for judgment as a matter of law, LG argues that the damages award should be set aside on two grounds: A) it relies on an unapportioned television ASP that was not in evidence; and B) it relies on an application of a legally unsupported tripling multiplier.

The Third Circuit has stated:

We will vacate a jury verdict if, "viewing the evidence in the light most favorable to the nonmovant and giving it the advantage of every fair and reasonable inference, there is insufficient evidence from which a jury reasonably" could have reached the result it did. *Lightning Lube v. Witco Corp.*, 4 F.3d 1153, 1166 (3d Cir. 1993).

Hill v. Reederei F. Laeisz G.M.B.H., 435 F.3d 404, 422 (3d Cir. 2006). Neither of LG's arguments succeed in persuading that there is insufficient evidence from which a jury could have reasonably awarded \$14.3 million in damages. The problem for LG, in short, is that the jury verdict is a "black box" general verdict: all we know is the result, the amount of damages

awarded. LG's two challenges on this motion rest on speculations about the jury's reasoning, but LG does not even attempt to demonstrate that, under Third Circuit law, a mere speculative hypothesis about the jury lacking sufficient evidence is sufficient to support the determination that there is insufficient evidence from which the jury reasonably could have reached the result it did. Nor has LG even attempted to persuade that the universe of possible paths to the jury's verdict is so limited that its hypotheses are likely possibilities. Instead, LG's ASP hypothesis, for example, appears to be one of myriad paths that the jury might have taken to reach the \$14.3 million damages verdict.

A. The television ASP hypothesis

1. *LG: the television ASP was not in evidence*

LG begins its JMOL argument with a reminiscence about one of Bratic's excluded theories. (Def.'s Br. at 4.) LG then cites a closing argument Mondis made to the jury, admitting that the calculation argued by Mondis is crucially different from Bratic's excluded theory. Bratic's excluded theory is a red herring and has nothing to do with the jury's verdict or LG's argument.

LG then presents a formula derived from Plaintiff's closing argument to the jury, and states:

While the re-trial jury appears to have rounded the award by reducing it by \$500,000 (to \$14.3 million), it is clear that the jury adopted Plaintiffs' barely-modified theory by using an improper television ASP, and applying a legally-unsupported tripling uplift multiplier. Because these two bases lack sufficient support in the evidentiary record and the law, the Court should grant JMOL, a new trial, and/or remittitur.

(Def.'s Br. at 5-6.) This is the foundation of LG's JMOL argument, and it begins with a glancing acknowledgement that, in fact, the actual amount the jury awarded is *not* the amount they would



have awarded if LG's theory about adopting the Mondis closing argument is correct. Implicit here is an acknowledgement that, had the jury applied the calculation method urged by Mondis in closing, it would have arrived at a different damages award. LG tries to minimize the half-a-million-dollar difference as rounding. The Court inquires: what did the jury round and why?<sup>12</sup> Does this shed any light on the question of how the jury reached its verdict?

LG's opening brief proceeds to rely on the proposition that the jury's damages calculation relied on a television ASP of \$518 – despite its acknowledgement that the jury's verdict is inconsistent with the calculation Mondis argued for in closing. It is not until the reply brief that LG says a little more about these numbers:

But [Plaintiff's] closing, as quoted in LG's brief, presented a methodology using the \$518 ASP that would result in \$14.8 million. The \$14.3 million award is either a downward adjustment, or the result of rounding the \$518 ASP to an even \$500 to output \$14,287,484 (essentially \$14.3 million). This is no coincidence.

(Def.'s Reply Br. at 2.) The Court agrees with LG that this is no coincidence – but because nothing coincides here: at closing, Mondis argued a calculation leading to one number (\$14.8 million), and the jury chose something different (\$14.3 million.) LG attempts to minimize the difference as a “downward adjustment” or the result of rounding. The Court observes that “downward adjustment” is a fudge factor<sup>13</sup> here, something that looks like an explanation but is not one. As for the rounding of \$518 to \$500, it is pure speculation. LG has offered no evidence to support the inference that the jury took the figure of \$518 from Plaintiff's closing argument

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<sup>12</sup> On what basis should the Court conclude that the figure of \$14.3 million was the result of rounding? Wouldn't the rounded version of that figure be an even \$14 million?

<sup>13</sup> “A term or factor inserted into a calculation to compensate for anticipated errors, or to arbitrarily make the result conform to some desired conclusion.” The American Heritage® Dictionary of the English Language, 5th Edition.

and rounded it to \$500, nor even any logical rationale to explain why it might do so. This is simply playing with numbers to support speculation about the jury's decision. LG has no foundation for its theories about the \$14.3 million damages verdict. There is no reason to infer that the jury followed the model proposed by Mondis at closing, nor any other.

From this erroneous premise, LG argues that the ASP of \$518 was not in evidence, and the parties have a robust debate about whether it was or it wasn't. The Court does not find that this dispute has any relevance to the question of whether the jury's damages verdict is supported by legally sufficient evidence, since the number produced by LG's ASP \$518 theory does not coincide with the jury's damages verdict.

The parties appear to agree that, if you take the Mondis closing argument theory, and you substitute \$500 as the television ASP, the end result is \$14.3 million, same as the jury verdict. While this appears to be an accurate observation, what is the significance of this observation for the motion presently before this Court? As Mondis points out – and LG agrees –, Mr. Hansen, LG's reasonable royalty expert, testified that the range of prices for LG's infringing TVs was \$217-\$768,<sup>14</sup> and Alessi testified that the range was \$300-\$700. Mondis argues that both of those ranges have a midpoint of \$500, which is true for the range of \$300-\$700; the midpoint of \$217-\$768 is actually \$492.50, not \$500. If, in fact, the jury used a \$500 ASP, Alessi's testimony provides exact evidentiary support for the figure, and the midpoint of Hansen's price range is close to \$500.

In reply, LG argues that Mondis cannot rely on either Hansen's or Alessi's price range testimony because neither provided any information about the volume distribution of sales prices

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<sup>14</sup> LG even referred to this range of television prices in its closing argument. (T2 Tr. 263:16-18.)

that would enable someone to calculate an average sales price. LG argues that, if the jury did rely on those ranges to estimate an ASP, it was mere speculation. In support, LG quotes the Federal Circuit's decision Finjan, Inc. v. Blue Coat Sys., 879 F.3d 1299, 1312 (Fed. Cir. 2018), in which the jury relied on a witness's statement of a specific figure that "appears to have been plucked from thin air" with no evidence to support it. In the instant case, however, two witnesses testified about a television sales price range with a midpoint around \$500, and, at closing, LG reminded the jury about Hansen's testimony about the television price range. In Finjan, the Federal Circuit stated: "While any reasonable royalty analysis necessarily involves an element of approximation and uncertainty, a trier of fact must have some factual basis for a determination of a reasonable royalty." Id. Under Finjan, the television price range testimony need only have given the jury "some factual basis." The Court finds that there was sufficient evidence to support a factual determination by the jury of an average television sales price of \$500.

It is at this point that it becomes apparent that LG's challenge to the legal sufficiency of the evidence to support the verdict has backfired, and has led to the recognition of a possible path, supported by sufficient evidence, which the jury could have followed in order to arrive at the damages verdict of \$14.3 million. This is the opposite result that LG intended and, as to the ASP theory, provides a sound basis to deny LG's renewed motion for judgment as a matter of law. The Federal Circuit has stated:

We review decisions on motions for JMOL under the law of the regional circuit. . In the Third Circuit, a 'court may grant a judgment as a matter of law contrary to the verdict only if the record is critically deficient of the minimum quantum of evidence to sustain the verdict. The court should grant JMOL 'sparingly' and 'only if, viewing the evidence in the light most favorable to the nonmovant and giving it the advantage of every fair and reasonable inference, there is insufficient

evidence from which a jury reasonably could find liability.’

SRI Int’l, Inc. v. Cisco Sys., 918 F.3d 1368, 1380 (Fed. Cir. 2019) (citations omitted). This Court finds that the record is not critically deficient of the minimum quantum of evidence to sustain the verdict, and, as to LG’s theory that there was insufficient evidence of record of the television ASP, LG’s motion for judgment as a matter of law must be denied.

2. *LG: the TV ASP was not apportioned*

LG next argues that the verdict must be set aside because it is based on the entire market value of televisions, rather than a value which has been apportioned for the value of non-infringing features, as required by Federal Circuit law. This challenge fails from the start, because, as LG itself wrote in its opening brief, the formula on which Mondis based its closing argument was derived from the testimony of LG’s expert, “Mr. Hansen’s formula for the Monitor Agreement.”<sup>15</sup> (Def.’s Br. at 5.) It is undisputed that the Mondis/LG monitor licensing agreement applied a per-unit royalty rate to the average sales price (“ASP”) of the product, and that Hansen’s formula further apportioned this by dividing by the number of patents covered by the license.<sup>16</sup> This is the approach to apportionment of LG’s expert, and it was LG’s expert that

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<sup>15</sup> It is surprising, to say the least, that LG now – at the end of everything – makes an argument that implies that its own expert’s analysis of the data point he called the “most instructive,” the Mondis/LG monitor agreement, failed to properly apportion the entire market value of the product.

<sup>16</sup> Both parties presented evidence and argument to the jury in which a reasonable royalty was calculated by multiplying a product average sales price by a royalty rate. Spiro testified that the Mondis/LG licensing agreement multiplied an average price per monitor of \$126 by a royalty rate. (T2 Tr. 116:8-13.) Hansen presented a reasonable royalty analysis based on the Mondis/LG licensing agreement, and at the re-trial, he agreed that he “assumed that in the negotiation the parties would use the monitor average price of 126 and not the TV average price of 518.” (T2 Tr. 173:4-8.) Mondis argued to the jury that Spiro and Mondis would not have agreed to a royalty based on the monitor average price, that it was too low, and that the average sales price of televisions should be used instead. Even Hansen’s “excess price analysis,” which

characterized this data point as the “most instructive.” (Re-trial Tr. 219:10-14.)

Leading up to the re-trial, and at the re-trial itself, the parties litigated many questions about how Mondis could make use of Hansen’s testimony. In particular, at sidebars during the re-trial, the parties debated the question of what Mondis would be allowed to argue to the jury about the ASP value Hansen used, and this Court ruled that Mondis could argue that the ASP used by Hansen was too low and that, in the hypothetical negotiation, Mondis would take the position that that the ASP should be \$518.

THE COURT: I am going to bar you from arguing that the 518 ASP rate should be a base. You were allowed to examine Mr. Hansen and cross him on why he did not use the ASP rate; but there's no evidence in the case that the ASP rate is, in fact, a reasonable start for the hypothetical negotiation. So while you can impeach and discredit Mr. Hansen, you can't turn around and, in fact, attempt to affirmatively use his testimony as a basis for your calculation with a 518 ASP rate, because he never, in fact, endorses a 518 ASP rate in any way, shape, or form.

MR. BLACK: But, Your Honor, we don't need Mr. Hansen's endorsement if there's record evidence which we have from Mr. Spiro, from a real-world witness and a negotiator, that that's how the program rate was developed. We also have the evidence that they used the ASP of the product, both in the program and specifically in an agreement between Mondis and LG. It's a fair argument to say that when they sat down at the table, that they would have used the price of the actual product at issue. In fact, I don't think the evidence supports any other conclusion. And that the jury should, therefore, be able to consider that they would have negotiated over the ASP of the televisions, rather than the ASP of the monitors.

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LG cites as if Hansen opined that further apportionment was needed (he did not do so), was based on a “product average selling price.” (T2 Tr. 216:25-217:1.) It is worth noting that Hansen’s ultimate conclusion that \$.10/unit was the reasonable royalty implies a belief that his excess price analysis estimate of \$.09/unit was too low. (T2 Tr. 218:23-219:2.) When Hansen identified the two data points he found “most instructive,” he did not mention his excess price analysis. (T2 Tr. 219:10-23.) The Court does not agree that Hansen testified that further apportionment of the entire market value was needed, and, to the extent that LG reads his excess price analysis as advocating the importance of doing so, a reasonable jury could have concluded that Hansen believed that that analysis gave a royalty estimate that was too low.

THE COURT: Thank you, Mr. Black. I'm not going to let you do the math on 518 ASP.

MR. BLACK: Am I allowed to tell the jury that -- am I allowed to argue the point that when they sat down at the negotiation, that the evidence in the case suggested they would have started with the television price, rather than the monitor price? That is supported in the record. In fact, it's largely undisputed.

THE COURT: Yes, you can.

(Re-trial Tr. 211:13-212:19.) The sidebar continued:

MR. BLACK: I won't do the math. Can I use this slide, which was 30, then? I'm sorry. I think that's consistent with what I just said. I would say you may consider these facts that LG says 126. We think the negotiation would have been 518. They say .25. We think .75.

THE COURT: At this point, no. Okay. Let's see how the further examination of Mr. Hansen goes, but at this point that's essentially doing what your other slide does. It's doing the math for them.

MR. BLACK: Okay. Can I -- well, okay. I'm allowed to say that -- that the negotiation, Mr. Spiro would have presented the 518 and the .75 percent, and they would have had Mr. Lamm's evidence that the '180 is really important, you must apportion -- you've got -- I can do that. I just can't use the slides.

THE COURT: That, you can do.

(Re-trial Tr. 213:18-214:8.) Another sidebar on the subject occurred shortly after:

THE COURT: Fine. And, Mr. Black, just to clarify. All right. You can argue to the jury that Mr. Hansen's base figure, the 220 or whatever it is, is low. But what you can't argue for is that your 500 and whatever it is ASP is the correct figure. You can argue that the record reflects that Mr. Hansen was too low. You can determine if he was too low, what would be the appropriate base.

MR. BLACK: I'm trying real hard here, Your Honor. This is not easy. So what I would like -- intend to do, then, is say that the parties walk into the negotiating room, we know what Mr. Spiro's position is, 518 at .75. He's got to give on the issue because he doesn't have as many patents anymore. That's his position. LG's position is whatever it is Mr. Hansen says. We think that Mr. Hansen did not give full credit to the evidence in the case because his 220 was too low, his multiplier was too low, whatever, that's okay.

THE COURT: That you can do. And you can do -- and based upon the evidence, you can determine whether or not your position is correct, which is it should be higher.

(Re-trial Tr. 227:2-21.)

In its closing argument, Mondis stated:

So I'm going to close the case the way I opened it. I'm going to tell you it's an undisputed fact that there are 19,049,978 infringing televisions. You'll have to construct the hypothetical negotiation. I'm not going to give you a number, I'm not going to give you an answer.

...

But you're entitled to consider what would have happened in that negotiation. Mr. Spiro would have walked in and he would have said, look at the Mondis/LG monitor agreement we had. That's the base. We have to start there. My program rates, as you know, were .75 percent for the 2B family. We use the ASP 518, and I got to make an adjustment. That's his position.

He might not win. You'll decide. You'll tell us. You're entitled to consider that the 2B family has to be reduced to the '180 patent. And that Mr. Hansen divided by five or six. And that Mr. Lamm said that the '180 patent is the most important of all.

(Re-trial Tr. 300:15-301:10.)

In short, LG offered its expert, Hansen, who testified that, in the hypothetical negotiation, the parties would agree to a royalty based on multiplying the monitor ASP by a royalty rate and adjusting for the number of patents covered. Mondis presented evidence about the position that Mondis and Spiro would take at the beginning of the hypothetical negotiation, that the ASP should be the television ASP, not the monitor ASP. Having presented this case, LG cannot now complain that further apportionment of the ASP was needed; LG cannot have it both ways.<sup>17</sup> The Court rejects LG's argument that the jury's verdict is based on reasoning that failed to

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<sup>17</sup> To some extent, LG appears to belatedly argue that it is fine to use the product ASP without further apportionment for unclaimed features when it is a lower number, but not fine when it is a higher number.

properly apportion the entire market value of the televisions.

LG's brief also argues that Mondis flouted the Court's rulings in arguing to the jury that they should substitute the TV ASP for the monitor ASP in Hansen's formula. As just discussed, the Court has reviewed both the rulings and Plaintiff's closing argument and disagrees with LG on this point. The record shows that the Court and the parties were very careful at the re-trial about how the jury would encounter evidence and argument about the television average sales price. This Court was careful to prohibit Mondis from making any suggestion to the jury that Hansen had endorsed the use of any television average sales price. Mondis complied and argued only that Spiro would have started the hypothetical negotiation with the \$518 average sales price as a starting position. Spiro testified that, during license negotiations, he used the product average sales price as the base. (Re-trial Tr. 106:3-24.) Plaintiff's closing argument about how Spiro would have approached the hypothetical negotiation is supported by the evidence and did not violate the prohibition against suggesting that Hansen endorsed use of the television sales price.

LG also argues that Mondis' closing argument urged the jury to make a royalty calculation without the guidance of an expert. The jury's damages verdict is limited by the evidence, not by the opinions of the experts. Finjan, Inc. v. Blue Coat Sys., 879 F.3d 1299, 1313 n.2 (Fed. Cir. 2018); Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1328 (Fed. Cir. 2014) ("if the record evidence does not fully support either party's royalty estimate, the fact finder must still determine what constitutes a reasonable royalty from the record evidence"); i4i Ltd. P'ship v. Microsoft Corp., 598 F.3d 831, 856 (Fed. Cir. 2010) ("Questions about what facts are most relevant or reliable to calculating a reasonable royalty are for the jury. The jury was entitled to



hear the expert testimony and decide for itself what to accept or reject.”)

**B. The uplift multiplier**

LG argues that the trial record lacks sufficient evidence to support use of the uplift multiplier (or uncertainty discount) by the jury. Again, given the “black box” nature of the jury verdict, we have no idea how the jury arrived at the damages verdict and whether the jury used any uplift multiplier; LG simply assumes that the jury must have. Mondis responds, persuasively, that LG has raised this argument in this case repeatedly, and this Court has rejected it repeatedly; the Court did so broadly in the Opinion on LG’s first JMOL (Docket Entry No. 558 at 22-29),<sup>18</sup> and denied LG’s first re-trial *in limine* motion, which sought to exclude Hansen’s testimony about the uplift in the Varian case (ruling in the Opinion of January 10, 2023, that the subject could be raised for the purpose of impeachment of Hansen.) At the re-trial, both Spiro and Hansen testified at some length about the principles and application of the uncertainty discount; LG acknowledges Spiro’s testimony, but argues that there is no evidence that anyone ever actually accepted an uplifted rate. Hansen testified that he recognized the principle underlying the uncertainty discount<sup>19</sup> and that he considered the impact of the condition of certainty or uncertainty as he considered the data in his analysis (see Re-trial Tr. 163-66.) Asked whether he had made an adjustment to reflect the fact that the hypothetical negotiation would occur under conditions of certainty that the patent is valid and infringed, Hansen replied: “I dealt

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<sup>18</sup> In deciding the LG’s motion for JMOL after the first trial, the Court’s analysis of the evidence for the uncertainty discount included testimony from Bratic, who did not appear at the re-trial. The Court discussed both Bratic’s testimony about the Innolux verdict and settlement, as well as Spiro’s. Bratic did not testify at re-trial, but Spiro and Hansen did testify again about the Innolux verdict and settlement.

<sup>19</sup> “I’m familiar with the concept that a patent that is determined to be valid and infringed is more valuable.” (T2 Tr. 176:10-11.)

with that on the broad scope of my analysis on an overall basis.” (Re-trial Tr. 166:21-22.) A reasonable jury hearing Hansen’s testimony could well have understood the expert to agree with the valuation principle on which the uncertainty discount is based, to have considered conditions of certainty or uncertainty when evaluating the comparable license data, to have agreed that he “dealt with that on the broad scope” of his analysis, and to have declined to explain in any detail just how he did so. (See, generally, Re-trial Tr. 163-67, 174-77.) LG even mentioned Plaintiff’s position on the uplift in its closing argument. (Re-trial Tr. 270:16-18.)

Furthermore, the Mondis/LG license and the TPV license were in evidence and demonstrated the use of pre-litigation discounted rates; both Hansen and Spiro testified that the later-occurring Innolux settlement was at the full rate awarded by the jury. In its closing argument, LG even reminded the jury that the Innolux jury verdict was at .75%.<sup>20</sup> (Re-trial Tr. 269:11-22.) While there is no way to know whether or not the jury applied an upward adjustment to account for the hypothetical negotiation’s condition of certainty, there was sufficient evidence in the record to support its doing so.

LG also argues that Mondis improperly used the Hansen/Varian evidence substantively, contrary to the Court’s limitation to impeachment purposes only, in the closing argument:

Now, another thing about the uplift, the uncertainty discount removal issue. Mr.

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<sup>20</sup> LG also argues that the jury verdict was tainted by the admission of the evidence of the Innolux verdict and settlement, and by Plaintiff’s “misuse” of this evidence. (Def.’s Br. at 31.) As Mondis points out in opposition, the admissibility of the Innolux evidence has been litigated repeatedly in this case, most recently in the *in limine* Opinion of January 10, 2023, when this Court ruled that, at re-trial, the Innolux evidence would be admitted or excluded to the same extent as in the first trial. Mondis Tech. Ltd. v. LG Elecs., Inc., 2023 U.S. Dist. LEXIS 4160, at \*12 (D.N.J. Jan. 10, 2023). See also Mondis Tech. Ltd. v. LG Elecs., Inc., 2021 U.S. Dist. LEXIS 169919, at \*19 (D.N.J. Sep. 8, 2021) (“The decision that the Innolux verdict is admissible as relevant to the reasonable royalty analysis is nothing new in this case.”) This is the law of the case, and the Court declines to relitigate the settled issue.

Hansen testified, I asked him: Isn't it true that you applied a three times uncertainty adjustment to the Stanford license in the Varian case? Yes or no. Well, the man just didn't want to answer that yes or no. The answer was yes. So he said I applied a particular clause that was three times as indicative of the upward influence for a patent that has been determined to be valid and infringed. And then I said: In the previous proceeding in this case, you said an upward evaluation of something that's appropriate and it's upward -- up to the jury to decide how much that should be in this case, based on the facts that you've heard. Correct? You said yes, it's the jury's decision. Correct? I did. The jury decides the damages. So in the end he applied a three X rate in another case. It's appropriate for you to consider that, as well as his credibility when he said he did every single one of his analyses that came to \$0.10 without doing any adjustment for uncertainty. And what that means is that Mr. Spiro's efforts to warn LG and to tell them what the terms of negotiation would be back in '08 would have been for naught if you accept Mr. Hansen.

(Re-trial Tr. 295:10-296:6.) As the record shows, Mondis directed this closing argument to the issue of Hansen's credibility. A reasonable jury could hear about Hansen's clear Varian testimony on the subject of the uncertainty adjustment and compare it to his testimony in this case, in order to make an inference about his credibility on the subject of the uncertainty adjustment in this case. A reasonable jury could have decided that Hansen's testimony about the role of the uncertainty adjustment in his analysis in this case was vague and of uncertain credibility, or deserving of less weight. The evidence of record contains legally sufficient evidence for the jury to decide that the condition of certainty in the hypothetical negotiation warranted a tripling uplift to the royalty rate, even though Hansen did not agree that this was warranted in this case. LG did not object to Plaintiff's closing argument at trial.

Although the JMOL standard to be applied in this case is a matter of Third Circuit law, the Federal Circuit has stated:

[W]e will not set aside a general verdict simply because the jury might have decided on a ground that was supported by insufficient evidence. We will uphold such a verdict if there was sufficient evidence to support any of the plaintiff's alternative factual theories; we assume the jury considered all the evidence and

relied upon a factual theory for which the burden of proof was satisfied.

i4i Ltd., 598 F.3d at 849-50 (citation omitted). In the end, LG’s JMOL arguments ask this Court to do what the Federal Circuit has declared it will not do: “set aside a general verdict simply because the jury might have decided on a ground that was supported by insufficient evidence.”

LG has failed to persuade the Court that the re-trial damages verdict is not supported by legally sufficient evidence. Instead, consideration of LG’s motion spotlights the support for the verdict in the evidence. LG’s approach demonstrates at least a recognition of a path the jury could have taken to arrive at its determination of a reasonable royalty, using the calculation Mondis argued in closing, but with a \$500 ASP. LG challenged two elements of this possible calculation, and the Court has found that the two challenged elements of that calculation are supported by legally sufficient evidence. Pursuant to i4i Ltd., the Court assumes that “the jury considered all the evidence and relied upon a factual theory for which the burden of proof was satisfied.” Id.

In McGinley, the Federal Circuit discussed issues quite similar to the ones raised by LG’s JMOL motion:

Due to the “black box” nature of the jury’s verdict, it is impossible to determine which of the above pieces of evidence, alone or in combination, carried the day in the jury room, and how much weight was assigned to each piece. All that can be said with certainty is that -- as a whole -- the evidence enumerated above (all of which was admittedly before the jury) constitutes substantial evidence to support the jury’s verdict. . . . But when a dispositive element of the factual equation, here whether to combine or modify key references, so clearly could have been decided by the jury in McGinley’s favor, it is not our place to elide the vagaries of a black box jury verdict by overriding the jury’s decision. Our law does not compel the use of special verdicts in these cases, and so long as the parties are content to give the jury unfettered room to operate on dispositive factual issues within the scope of a general verdict request, we must be mindful of our role as an appellate court and respect the verdict reached . . .

McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 1356 (Fed. Cir. 2001). In the instant case, LG has directed its argument to two “dispositive elements” – the television ASP and the uncertainty adjustment. The Court has considered the evidence at trial and finds that, as to the two key elements picked out by LG: 1) while the \$518 television ASP does not appear to have been a dispositive element, there was legally sufficient evidence for the jury to find a \$500 television ASP; and 2) as to the uncertainty adjustment, there was legally sufficient evidence for the jury to make findings in Plaintiff’s favor. These findings support the jury’s damages award. The jury’s verdict is supported by legally sufficient evidence and must be respected.

LG argues, in the alternative, that the Court should remit the damages award to Hansen’s \$1.9 million. The evidence at trial supports the jury’s award as it stands.

In conclusion, LG’s motion for judgment as a matter of law under Rule 50(b), a new trial under Rule 59, and/or remittitur regarding damages is denied; Plaintiff’s motion for enhanced damages and attorneys’ fees, pursuant to 35 U.S.C. §§ 284 and 285, is denied; and Plaintiff’s motion for prejudgment and postjudgment interest is granted in part and denied in part.

s/ Stanley R. Chesler  
Stanley R. Chesler, U.S.D.J.

Dated: June 1, 2023

**UNITED STATES DISTRICT COURT  
DISTRICT OF NEW JERSEY**

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MONDIS TECHNOLOGY LTD,

Plaintiff,

v.

LG ELECTRONICS, INC.  
et al.,

Defendants.

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Civil Action No. 15-4431 (SRC)

**ORDER**

**CHESLER, U.S.D.J.**

This matter having come before the Court on three motions: 1) the motion by Defendants LG Electronics, Inc. and LG Electronics U.S.A., Inc. (collectively, “LG”) for judgment as a matter of law under Rule 50(b), a new trial under Rule 59, and/or remittitur regarding damages; 2) the motion by Plaintiff Mondis Technology Ltd (“Mondis”) for enhanced damages and attorneys’ fees, pursuant to 35 U.S.C. §§ 284 and 285; and 3) Mondis’ motion for pre-judgment and post-judgment interest; and having considered the parties’ submissions; and for the reasons stated in the accompanying Opinion, and good cause appearing,

**IT IS** on this 1st day of June, 2023

**ORDERED** that LG’s motion for judgment as a matter of law under Rule 50(b) and/or a new trial and/or remittitur (Docket Entry No. 772) is **DENIED**; and it is further

**ORDERED** that Mondis’ motion for enhanced damages and attorneys’ fees (Docket Entry No. 776), pursuant to 35 U.S.C. §§ 284 and 285, is **DENIED**; and it is further

**ORDERED** that Mondis' motion for prejudgment and postjudgment interest (Docket Entry No. 774) is **GRANTED** in part and **DENIED** in part; Plaintiff is awarded prejudgment interest on the jury's \$14.3 million damages award running from June 21, 2014 until the date of entry of the Order of Final Judgment, said interest to be calculated using the Treasury Bill rate and simple interest without compounding; and Plaintiff is awarded statutory postjudgment interest, as calculated under 28 U.S.C. § 1961, on the entire amount of the Court's award, including the jury's damages award and prejudgment interest; and it is further

**ORDERED** that Plaintiff shall submit a proposed Order of Final Judgment in conformity with the Court's decisions.

s/ Stanley R. Chesler  
Stanley R. Chesler, U.S.D.J.

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW JERSEY**

MONDIS TECHNOLOGY LTD.,  
HITACHI MAXELL, LTD., n/k/a  
MAXELL HOLDINGS, LTD., and  
MAXELL, LTD.

Plaintiffs,

v.

LG ELECTRONICS, INC. and  
LG ELECTRONICS U.S.A., INC.,

Defendants.

Civil Case No.: 2:15-cv-04431  
(SRC)(CLW)

**FINAL JUDGMENT**

Pursuant to Rule 58 of the Federal Rules of Civil Procedure and in accordance with the juries' verdicts and the entirety of the record available to the Court, the Court hereby **ORDERS** and **ENTERS JUDGMENT** as follows:

1. LG Electronics Inc. and LG Electronics U.S.A., Inc. (collectively, "LG")  
infringed claims 14 and 15 of the '180 patent.
2. LG's infringement of claims 14 and 15 of the '180 patent was willful.
3. Claims 14 and 15 of the '180 patent have not been found invalid.
4. Plaintiffs are hereby awarded compensatory damages against LG  
Electronics Inc. and LG Electronics U.S.A., Inc., who shall be jointly and  
severally liable. Plaintiffs shall accordingly have and recover from LG



Electronics Inc. and LG Electronics U.S.A., Inc. the sum of \$14,300,000.

5. Plaintiffs are hereby awarded prejudgment interest on the jury's \$14,300,000 verdict from June 21, 2014, until the judgment is satisfied by LG Electronics Inc. and LG Electronics U.S.A., Inc., who shall be jointly and severally liable. Plaintiffs shall accordingly have and recover \$1,706,272 in interest for the time period of June 21, 2014, to and including June 7, 2023 with the amount of interest to run from that date through the entry of judgment at the rate of \$1,880 per day.
6. Plaintiffs are hereby awarded postjudgment interest on the entire amount of the Court's award, including the jury's damages award and prejudgment interest, in conformity with 28 U.S.C. § 1961(a) from LG Electronics Inc. and LG Electronics U.S.A., Inc., who shall be jointly and severally liable.

The Clerk is directed to **CLOSE** this case.

**So ORDERED and SIGNED this 16th day of June, 2023.**

s/ Stanley R. Chesler

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Hon. Stanley R. Chesler  
UNITED STATES DISTRICT JUDGE

U 7697389

# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office

October 18, 2018

THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM  
THE RECORDS OF THIS OFFICE OF:

U.S. PATENT: 7,475,180

ISSUE DATE: *January 06, 2009*

By Authority of the  
Under Secretary of Commerce for Intellectual Property  
and Director of the United States Patent and Trademark Office



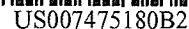
A handwritten signature in cursive script, reading "M. Tarver", is written over the printed name.

M. TARVER  
Certifying Officer

PLAINTIFF'S  
EXHIBIT

**MON-0001**

2:15-cv-04431-SRC-CLW



(10) **Patent No.:** US 7,475,180 B2  
(45) **Date of Patent:** Jan. 6, 2009

- (58) **Field of Classification Search** ..... 710/301-304,  
710/8-10, 15-16, 305, 313, 62-64, 72-73,  
710/6, 306-308, 104-110; 345/58, 99-100,  
345/132, 204  
See application file for complete search history.

- (56) **References Cited**  
U.S. PATENT DOCUMENTS  
3,691,295 A 9/1972 Fisk

- |                          |         |        |
|--------------------------|---------|--------|
| (Continued)              |         |        |
| FOREIGN PATENT DOCUMENTS |         |        |
| DE                       | 2413839 | 9/1975 |

- DE 2413839 9/1975

- (Continued)

- ## OTHER PUBLICATIONS

- Nasa Tech Brief, "Interface for Color-Video Monitor", Apr. 1988, pp. 246-247.

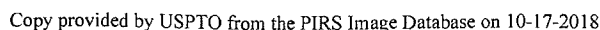
## (Continued)

- Primary Examiner—Raymond N Phan  
(74) Attorney, Agent, or Firm—Antonelli, Terry, Stout & Kraus, LLP.

- (57) **ABSTRACT**

- A display unit for displaying an image based on video signals and synchronization signals inputted from an externally connected video source, includes a video circuit adapted to display an image based on the video signals sent by the externally connected video source, a memory which stores an identification number for identifying the display unit, and a communication controller which sends the identification number stored in the memory to the video source. The communication controller is capable of bi-directionally communicating with the video source.

- 29 Claims, 12 Drawing Sheets**



# US 7,475,180 B2

Page 2

## U.S. PATENT DOCUMENTS

4,007,443 A	2/1977	Bromberg et al.	5,060,079 A	10/1991	Rufus-Isaacs
4,047,158 A	9/1977	Jennings	5,068,732 A	11/1991	Satoh
4,145,179 A	3/1979	Tachi	5,072,411 A *	12/1991	Yamaki ..... 345/520
4,145,719 A	3/1979	Hand et al.	5,073,773 A	12/1991	Van Steenbrugge
4,148,070 A	4/1979	Taylor	5,092,686 A	3/1992	Tsukamoto
4,159,480 A	6/1979	Tachi	5,109,434 A	4/1992	Shimizu et al.
4,169,262 A	9/1979	Schwartz et al.	5,117,070 A	5/1992	Ueno et al.
4,172,264 A	10/1979	Taylor et al.	5,126,725 A	6/1992	Yanagisawa
4,177,462 A	12/1979	Chung et al.	5,128,677 A	7/1992	Donovan et al.
4,197,590 A	4/1980	Hofmanis et al.	5,136,695 A	8/1992	Goldshlag et al.
4,251,755 A	2/1981	Bryden	5,138,305 A	8/1992	Tomiyasu
4,342,029 A	7/1982	Hofmanis et al.	5,138,565 A	8/1992	Satou
4,394,689 A	7/1983	Wallace et al.	5,142,576 A	8/1992	Nadan
4,415,985 A	11/1983	McDaniel et al.	5,144,290 A	9/1992	Honda et al.
4,429,384 A	1/1984	Kaplinsky	5,150,109 A	9/1992	Berry
4,450,535 A	5/1984	De Pommery et al.	5,151,997 A	9/1992	Bailey et al.
4,451,824 A	5/1984	Thayer et al.	5,159,683 A	10/1992	Lvovsky et al.
4,468,768 A	8/1984	Sunkle et al.	5,166,893 A	11/1992	Hosoi
4,497,036 A	1/1985	Dunn	5,175,750 A	12/1992	Donovan et al.
4,534,012 A	8/1985	Yokozawa	5,202,961 A	4/1993	Mills et al.
4,563,677 A	1/1986	Seiler	5,216,504 A	6/1993	Webb et al.
4,574,279 A	3/1986	Roberts	5,222,212 A	6/1993	Johary et al.
4,589,063 A	5/1986	Shah et al.	5,227,863 A *	7/1993	Bilbrey et al. .... 358/22
4,591,974 A	5/1986	Dornbush et al.	5,227,881 A	7/1993	Wess et al.
4,626,837 A	12/1986	Priestly	5,233,547 A	8/1993	Kapp et al.
4,626,892 A	12/1986	Nortrup et al.	5,237,488 A	8/1993	Moser et al.
4,641,262 A	2/1987	Bryan et al.	5,241,281 A	8/1993	Wilkes et al.
4,665,433 A	5/1987	Hinson et al.	5,251,031 A	10/1993	Tagami
4,672,501 A	6/1987	Bilac et al.	5,253,060 A	10/1993	Welmer
4,680,647 A	7/1987	Moriyama	5,257,350 A	10/1993	Howard et al.
4,689,669 A *	8/1987	Hoshino et al. .... 358/80	5,262,759 A	11/1993	Moriconi et al.
4,689,740 A	8/1987	Moelands et al.	5,264,992 A	11/1993	Hogdahl et al.
4,727,362 A	2/1988	Rackley et al.	5,270,821 A	12/1993	Samuels
4,727,947 A	3/1988	Naito	5,276,458 A	1/1994	Sawdon
4,736,324 A	4/1988	Sainen et al.	5,276,875 A	1/1994	Satoh
4,737,772 A	4/1988	Nishi et al.	5,282,247 A	1/1994	McLean et al.
4,743,968 A	5/1988	Mogi et al.	5,285,197 A	2/1994	Schmidt et al.
4,745,404 A	5/1988	Kallenberg	5,309,174 A	5/1994	Minkus
4,747,041 A	5/1988	Engel et al.	5,309,504 A	5/1994	Morganstein
4,754,204 A	6/1988	Ando et al.	5,315,695 A	5/1994	Saito et al.
4,757,239 A	7/1988	Starkey, IV	5,317,691 A	5/1994	Traeger
4,757,443 A	7/1988	Hecker et al.	5,319,582 A	6/1994	Ma
4,775,857 A	10/1988	Staggs	5,321,750 A	6/1994	Nadan
4,779,132 A	10/1988	McBeath et al.	5,347,630 A	9/1994	Ishizawa et al.
4,788,658 A	11/1988	Hanebuth	5,353,423 A	10/1994	Hamid et al.
4,789,856 A	12/1988	Yokota et al.	5,371,518 A	12/1994	Hannah
4,794,381 A	12/1988	Iwai	5,375,210 A	12/1994	Monnes et al.
4,800,376 A	1/1989	Suga et al.	5,389,952 A	2/1995	Kikinis
4,839,638 A	6/1989	Kosler et al.	5,396,593 A	3/1995	Mori et al.
4,870,531 A	9/1989	Danek	5,444,849 A	8/1995	Farrand et al.
4,875,158 A	10/1989	Ashkin et al.	5,446,740 A	8/1995	Yien et al.
4,882,687 A	11/1989	Gordon	5,448,697 A	9/1995	Parks et al.
4,893,248 A	1/1990	Pitts et al.	5,457,473 A	10/1995	Arai et al.
4,910,655 A	3/1990	Ashkin et al.	5,483,255 A	1/1996	Numao
4,912,627 A	3/1990	Ashkin et al.	5,483,260 A	1/1996	Parks et al.
4,918,598 A	4/1990	Ashkin et al.	5,491,805 A	2/1996	Welmer
4,922,448 A	5/1990	Kunieda et al.	5,499,018 A	3/1996	Welmer
4,930,160 A	5/1990	Vogel	5,499,040 A	3/1996	McLaughlin et al.
4,939,652 A	7/1990	Steiner	5,506,602 A	4/1996	Yokoyama
4,970,655 A	11/1990	Winn et al.	5,526,043 A	6/1996	Wen
4,980,678 A	12/1990	Zenda	5,546,098 A	8/1996	Moriconi
4,990,904 A	2/1991	Zenda	5,546,759 A	8/1996	Lee
4,991,023 A	2/1991	Nicols	5,550,556 A	8/1996	Wu
4,995,080 A	2/1991	Bestler et al.	5,550,966 A	8/1996	Drake et al.
5,010,238 A	4/1991	Kadono et al.	5,576,735 A	11/1996	Kikuchi et al.
5,012,339 A	4/1991	Kurata et al.	5,599,231 A	2/1997	Hibino et al.
5,031,118 A	7/1991	Morizot	5,602,567 A	2/1997	Kanno
5,038,301 A	8/1991	Thoma, III	5,608,730 A	3/1997	Osakabe et al.
5,047,754 A	9/1991	Akatsuka et al.	5,670,969 A	9/1997	Yamagami
5,051,827 A	9/1991	Fairhurst	5,671,371 A	9/1997	Kondo et al.
5,054,022 A	10/1991	Van Steenbrugge	5,686,934 A	11/1997	Nonoshita et al.
			5,691,741 A	11/1997	Kerigan et al.
			5,727,191 A	3/1998	Konishi et al.

# US 7,475,180 B2

Page 3

5,740,436 A	4/1998	Davis et al.	EP	0 653 090 B1	11/1998
5,742,273 A	4/1998	Flinders et al.	FI	914435	3/1993
5,764,547 A	6/1998	Bilich et al.	FI	923949	3/1994
5,771,028 A	6/1998	Dalton et al.	GB	2223114	3/1990
5,828,834 A	10/1998	Choi	GB	2 235 358 A	2/1991
5,850,209 A	12/1998	Lemke et al.	GB	2 270 451 A	3/1994
5,887,147 A	3/1999	Arai et al.	GB	1495173	12/1997
5,896,546 A	4/1999	Monahan et al.	JP	54-159130	12/1979
5,909,592 A	6/1999	Shipman	JP	58-103034	6/1983
5,910,806 A	6/1999	Narui et al.	JP	59-101695	6/1984
5,917,462 A	6/1999	Suzuki et al.	JP	60-117327	6/1985
5,926,155 A	7/1999	Arai et al.	JP	60-154396	8/1985
5,943,029 A	8/1999	Ross	JP	61-16643	1/1986
5,948,091 A	9/1999	Kerigan et al.	JP	61-84688	4/1986
6,011,592 A	1/2000	Vaughan et al.	JP	61-290529	12/1986
6,012,103 A	1/2000	Sartore et al.	JP	63-113625	5/1988
6,052,740 A	4/2000	Frederick	JP	63-148327	6/1988
6,057,812 A	5/2000	Arai et al.	JP	1-274232	11/1989
6,057,860 A	5/2000	Hoffert et al.	JP	1-321475	12/1989
6,078,301 A	6/2000	Arai et al.	JP	H01-173787	12/1989
6,169,535 B1	1/2001	Lee	JP	2-007696	1/1990
6,175,356 B1	1/2001	Jung	JP	2-77088	3/1990
6,219,451 B1	4/2001	Hunt et al.	JP	2-103592	4/1990
6,223,283 B1	4/2001	Chaiken et al.	JP	2-127688	5/1990
6,247,090 B1 *	6/2001	Arai et al. .... 710/305	JP	2-250576	10/1990
6,263,440 B1	7/2001	Pruett et al.	JP	2-257196	10/1990
6,285,397 B1	9/2001	Webb et al.	JP	2-293791	12/1990
6,300,921 B1	10/2001	Moriconi et al.	JP	2-305293	12/1990
6,300,980 B1	10/2001	McGraw et al.	JP	3-56931	3/1991
6,304,236 B1	10/2001	Arai et al.	JP	3-056931	3/1991
6,304,895 B1	10/2001	Schneider et al.	JP	3-056993	3/1991
6,346,930 B2	2/2002	Arai et al.	JP	3-56993	3/1991
6,348,904 B1	2/2002	Arai et al.	JP	3-116093	5/1991
6,437,829 B1	8/2002	Webb et al.	JP	3-118595	5/1991
6,473,060 B1	10/2002	Kim	JP	3-160494	5/1991
6,549,970 B2	4/2003	Arai et al.	JP	3-148697	6/1991
6,590,547 B2	7/2003	Moriconi et al.	JP	3-160494	7/1991
6,590,572 B1	7/2003	Hoffert et al.	JP	3-177919	8/1991
6,618,773 B1	9/2003	Chang et al.	JP	03-204059	9/1991
6,639,588 B2	10/2003	Arai et al.	JP	3-226792	10/1991
6,686,895 B2	2/2004	Arai et al.	JP	3-242688	10/1991
6,693,622 B1	2/2004	Shahoian et al.	JP	3-261995	11/1991
2002/0152347 A1	10/2002	Arai et al.	JP	03-267841	11/1991
2004/0061692 A1	4/2004	Arai et al.	JP	3-121442	12/1991
2004/0196276 A1	10/2004	Arai et al.	JP	4-21024	1/1992
			JP	4-021024	1/1992
			JP	4-037787	2/1992
			JP	5-46106	2/1993
			JP	5-046106	2/1993
			JP	5-083719	4/1993
			JP	5-158586	6/1993
			JP	5-232918	9/1993
			JP	5-244404	9/1993
			JP	6-116643	4/1994
			JP	6-184688	7/1994
			JP	6-236339	8/1994
			JP	5-232918	10/1995
			JP	62-136696	3/2006
			KR	1993-0009801	10/1993
			WO	WO 93/06587	4/1993

## FOREIGN PATENT DOCUMENTS

DE	2703579	8/1977
DE	2804294	8/1978
DE	28 39 888	3/1980
DE	3512278	11/1985
DE	37 22 169 A1	1/1989
DE	40 25 295	2/1991
DE	40 252 95	2/1991
DE	43 36 116 A1	5/1994
EP	0 042 034 A1	12/1981
EP	0 182 097 A2	5/1986
EP	0 257 684	3/1988
EP	0 303 138 A2	2/1989
EP	0 224 802 B1	2/1990
EP	0 448 267 A2	9/1991
EP	0 456 012 A2	11/1991
EP	0 456 923 A1	11/1991
EP	0 545 828 A3	9/1993
EP	0 612 053 A1	8/1994
EP	0612053 A1	8/1994
EP	0 456 923 B1	10/1994
EP	0 618 561 A2	10/1994
EP	0 665 525 A3	8/1995
EP	0 708 399 A2	4/1996
EP	0 760 499 A1	3/1997
EP	0 856 993 A2	8/1998

## OTHER PUBLICATIONS

"Display Function Identification", IBM Technical Disclosure Bulletin, vol. 28, No. 12, pp. 5568-5579, May 1980.  
"Monitor Identification Technique", IBM Technical Disclosure Bulletin, vol. 30, No. 2, pp. 839-840, Jul. 1987.  
"Display Controller Set up as a Function of Display Monitor Type, Display Jumper Settings and Amounts of Vram", IBM Technical Disclosure Bulletin, vol. 33, No. 2, pp. 352-353, Jul. 1990.  
"Improved Method of Monitor Identification and Mode Control", IBM Technical Disclosure Bulletin, vol. 33, No. 5, pp. 289-291, Oct. 1990.

- "Improvements to Display Identification", IBM Technical Disclosure Bulletin, vol. 33, No. 6B, pp. 83-85.
- "Self-Identification Protocol Initialization", IBM Technical Disclosure Bulletin, vol. 33, No. 10A, pp. 406-407, Mar. 1991.
- CEBus Comes One Step Closer To Reality, Domestic Automation, K. Davidson, Apr./May 1990 pp. 85-86.
- Audio, Video and Audiovisual System Domestic Digital Bus (D2b), International Standard CEI IEC 61030, May 1991 (first edition), International Electrotechnical Commission.
- ACCESS.bus, Hardware and Protocol Specifications, Version 2.0, Jun. 1992, Digital Equipment Corporation.
- IEEE Standard Codes, Formats, Protocols, and Common Commands For Use With ANSE/IEEE Std 488.1-1987, IEEE Standard Digital Interface For Programmable Instrumentation, Apr. 22, 1988.
- "Video Subsystem," IBM Corp., May 1992, TPV 059548-9971.
- "Video Subsystem," IBM Corp., 1990, TPV 059422-9547.
- "The 12C-Bus Specification, Version 2.1," Phillips Semiconductor, Jan. 2000, TPV 059376-9421.
- "ACCESS.bus, Specification Version 3.0," ACCESS.bus Industry Group, Sep. 1995, TPV 059173-9375.
- "Display Function Identification," IBM Technical Disclosure Bulletin, May 1986, TPV 040214.
- "IBM Personal System/2," IBM Corp., Entry Systems Division, May 1987, TPV 040215-0230.
- "Monitor Identification Technique," IBM Technical Disclosure Bulletin, Jul. 1987, TPV 040231.
- "Discrimination of Type of Display Devise," IBM Technical Disclosure Bulletin, Oct. 1987, TPV 040232-0233.
- "Advances in CRT Displays" by Carlo Infante, CBI, 1988, TPV 040234-0237.
- "Automatic Alignment Techniques for Color Television Manufacturing" by Leonard Suckle, Motorola, Inc., Semiconductor Products Sector, Nov. 1988, TPV 040238-0245.
- "The Calibrator Explained" by J.B. Van Elstlande et al., Barco, Apr. 1990, TPV 040246-0291.
- "Display Controller Set Up as a Function of Display Monitor Type, Display Jumper Settings and Amount of VRAM," IBM Technical Disclosure Bulletin, Jul. 1990, TPV 040292-0293.
- "Multimode High Definition and Personal Computer Monitor Chip Set" by Geoffrey W. Perkins et al., Motorola, Inc., Bipolar analog IC Design, Aug. 1990, TPV 040294-0302.
- "Improved Method of Monitor Identification and Mode Control," IBM Technical Disclosure Bulletin, Oct. 1990, TPV 040303-0305.
- "Monitor Identification Range Extension," IBM Technical Disclosure Bulletin, Nov. 1990, TPV 040306.
- "Improvements to Display Identification," IBM Technical Disclosure Bulletin, Nov. 1990, TPV 040307-0309.
- "Self-Identification Protocol Initialization," IBM Technical Disclosure Bulletin, Mar. 1991, TPV 040310-0311.
- "ACCESS.bus, an Open Desktop Bus" by Peter A. Siebel, Digital Technology Journal, 1991, TPV 040312-0318.
- "I<sup>2</sup>C-Bus and How to Use it," Philips Semiconductors, Jan. 1992, TPV 040319-0346.
- "Power Programming . . . the IBM XGA" by Jake Richter, MIS: Press, 1992, TPV 040347-0381.
- "Build an Intelligent Display" by Tom Ryan, Eactiva, Aug. 1992, TPV 040382-0383.
- "Monitor Standard Impacts Software" by Lisa L. Spiegelman, Dow Jones Interactive, Oct. 1992, TPV 040384-0385.
- "Standards Open the Door to the New Digital Video—New Solutions Provide Easy Market Entry" by Ron McCabe, Factiva, Nov. 1992, TPV 040386-0389.
- "Method for Expanding Monitor Identification Capability," IBM Technical Disclosure Bulletin, Oct. 1993, TPV 040390-0391.
- "ACCESS.bus, Monitor Device Protocol Specification," ACCESS/bus Industry Group, Sep. 1995, TPV 040392-0419.
- "VESA Display Configuration Protocol, Proposal to VESA Monitor Timing Committee" by Richard Atanus et al., NEC Tech., Inc., Apr. 1992, TPV-VESA 001591-1614.
- "Display Communication Channel Level 1" by Jarmo Kurikko, ICL Personal Systems, Apr. 1992, TPV-VESA 001516-1525.
- "Monitor Data Transfer" by Adge Hawes, IBM Boca Raton, Sep. 1992, TPV-VESA 001351-1369.
- "ICL Proposal, Display Communication Channel Level 1," ICL Personal Systems, Oct. 1992, TPV-VESA 001370-1378.
- "CHI: The Combined Human Interface" by Bob Myers, Hewlett Packard Co., Dec. 1992, TPV-VESA 001065-1074.
- "A Low-Cost Data Communication Channel Using Existing Synchronization Signal Lines" by Bob Myers, Hewlett Packard Co., User-Interface Hardware Lab, Advanced Systems Division, Sep. 1993, TPV-VESA 005062-5067.
- "Proposed VESA Standard, Serial Data Communications via Display Synchronization Lines" by Bob Myers, Hewlett Packard Co., Oct. 1993, TPV-VESA 005003-5014.
- Misc. document entitled "The Hardware Approach," no author or date, TPV-VESA 002918.
- Misc. document entitled "Display Communication Channel Function Needs," no author or date, TPV-VESA 000481-0483.
- Misc. document entitled "VDIF, Three Character Manufacture ID," no author or date, TPV-VESA 004031.
- Fax from Jan Shepard, dated Sep. 4, 1990, TPV-VESA 002919-2921.
- Letter from Anders Frisk entitled "VESA Monitor Committee, VDDP Status Report," dated Jul. 24, 1992, TPV-VESA 003979.
- Letter from Tom Ryan, dated Jul. 28, 1992, TPV-VESA 003974.
- Fax from Anthony Cox, dated Jan. 13, 1992, TPV-VESA 008537-8542.
- Letter from Tom Ryan, dated Feb. 2, 1993, TPV-VESA 003716.
- Email from Bob Myers entitled "DCC Desired Functionality," dated Mar. 26, 1993, TPV-VESA 000485-0487.
- Letter from Anders Frisk entitled "New VESA Standards, VESA Display Information Format, VDIF 1.0, Video Image Area Definition, VIAD 1.0," dated Aug. 25, 1993, TPV-VESA 004030.
- Misc. document entitled "Display Data Channel (DDC) Questions and Answers," no author or date, TPV-VESA 010482-0485.
- "VESA Announces Display Data Channel (DDC) Standard for Monitors" by Valdis Hellevik et al., InterActive Public Relations, Inc., Sep. 12, 1994, TPV-VESA 005680-5682.
- Misc. document entitled "Master Meeting Schedule," no author or date, TPV-VESA 004286-4287.
- VESA General Meeting Minutes, dated Oct. 20, 1999, TPV-VESA 040481-4083.
- Monitor Timing Committee Meeting Minutes, dated Feb. 13, 1992, TPV-VESA 030443-0445.
- VESA Board General Membership Meeting Minutes, dated Feb. 21, 1992, TPV-VESA 004088-4093.
- VESA General Membership Meeting Minutes—PC Expo, dated Jun. 22, 1992, TPV-VESA 017682-7684.
- VESA Monitor Committee Meeting Minutes, dated Jul. 9, 1992, TPV-VESA 001206-1216.
- Monitor Committee Meeting Minutes, dated Jul. 11, 1992, TPV-VESA 030448-0449.
- VESA Monitor Meeting Minutes, dated Aug. 13, 1992, TPV-VESA 030452-0455.
- VESA Monitor Meeting Minutes, dated Sep. 10, 1992, TPV-VESA 030466-0467.
- VESA Monitor Meeting Minutes, dated Oct. 7-8, 1992, TPV-VESA 030474-0475.
- VESA Monitor Committee Minutes, dated Nov. 5, 1992, TPV-VESA 030478-0479.
- VESA Monitor Meeting Minutes, dated Dec. 10, 1992, TPV-VESA 030482-0483.
- VESA Monitor Committee Meeting Minutes, dated Jan. 14, 1993, TPV-VESA 003787-3788.
- VESA Monitor Committee Meeting Minutes, dated Feb. 11, 1993, TPV-VESA 030491-0492.
- VESA Monitor Committee Meeting Minutes, dated Apr. 15, 1993, TPV-VESA 030493-0494.
- VESA Monitor Meeting Minutes, dated May 13, 1993, TPV-VESA 030495-0498.
- VESA Monitor Meeting Minutes, dated Jun. 10, 1993, TPV-VESA 030499-0501.
- VESA Monitor Meeting Minutes, dated Jul. 15, 1993, TPV-VESA 030502-0506.
- VESA Monitor Meeting Minutes, dated Aug. 12, 1993, TPV-VESA 030507-0511.

- VESA Monitor Meeting Minutes, dated Sep. 16, 1993, TPV-VESA 030512-0514.
- VESA Monitor Meeting Minutes, dated Dec. 9, 1993, TPV-VESA 030517-0518.
- VDDP Proposal, Draft 1, dated Jan. 9, 1992, TPV-VESA 001744-1749.
- VDDP Proposal, Draft 2, dated Feb. 13, 1992, TPV-VESA 001681-1699.
- VDDP Proposal, Draft 3, dated Mar. 12, 1992, TPV-VESA 007331-7338.
- VDDP Proposal, Draft 4, dated May 6, 1992, TPV-VESA 001491-1510.
- VDDP Proposal, Draft 4.4, dated Jun. 9, 1992, TPV-VESA 007416-7432.
- VDDP Proposal, Draft 4.91, dated Jul. 8, 1992, TPV-VESA 014078-4112.
- VDDP Proposal, Draft 5.05, dated Jul. 24, 1992, TPV-VESA 007339-7379.
- VDDP Proposal, Draft 5.10, dated Sep. 7, 1992, TPV-VESA 007433-7471.
- VDDP Proposal, Draft 5.11, dated Sep. 10, 1992, TPV-VESA 001386-1432.
- VDDP Proposal, Draft 6.0, dated Oct. 6, 1992, TPV-VESA 007472-7513.
- VDDP Proposal, Revision p0.9, dated Nov. 4, 1992, TPV-VESA 001018-1055.
- VDIF Proposal, Revision p0.91, dated Nov. 6, 1992, TPV-VESA 000958-0995.
- VDID Proposal, Revision p0.93, dated Dec. 8, 1992, TPV-VESA 008498-8535.
- VDIF Proposal, Revision p0.94, dated Dec. 10, 1992, TPV-VESA 001135-1171.
- Fax from Anthony Cox entitled "VDIF Proposal Revision No. p0.94," dated Jan. 13, 1993, TPV-VESA 008537-8542.
- VDIF Proposal, Revision p0.95c4, dated Jan. 13, 1993, TPV-VESA 008582-8622.
- VDIF Proposal, Revision p0.96, dated Jan. 15, 1993, TPV-VESA 003743-3782.
- VDIF Proposal, Revision p1.00, dated Apr. 14, 1993, TPV-VESA 007640-7684.
- VDIF Proposal, Revision p1.01, dated Apr. 14, 1993, TPV-VESA 007597-7638.
- VDIF Proposal, Revision p1.03, dated Apr. 16, 1993, TPV-VESA 007555-7595 TPV-VESA 004679-4718.
- VDIF Proposal, Draft 1.0, dated Aug. 23, 1993, TPV-VESA 003986-4022.
- DDC Initial Proposal, Version 1.0p, Revision 0.1p, dated Oct. 10, 1993, TPV-VESA 005038-5035.
- DDC Initial Proposal, Version 1.0p, Revision 0.21p, dated Nov. 1, 1993, TPV-VESA 007294-7313.
- DDC Initial Proposal, Version 1.0p, Revision 0.22p, dated Nov. 3, 1993, TPV-VESA 005336-5355.
- Monitor Device Protocol Specification, Draft Version, dated Dec. 3, 1993, TPV-VESA 005407-5438.
- DDC Proposal, Version 1.0p, Revision 0.40p, dated Dec. 8, 1993, TPV-VESA 005378-5403.
- VBE/DI Proposal, Version 1.0p, Revision 0.1p, dated Dec. 9, 1993, TPV-VESA 005368-5377.
- DDC Proposal, Version 1.0p, Revision 0.50p, dated Dec. 12, 1993, TPV-VESA 031547-1572.
- DDC Proposal, Version 1.0p, Revision 0.48, dated Dec. 27, 1993, TPV-VESA 006424-6450.
- DDC Proposal, Version 1.0p, Revision 0.491, dated Feb. 2, 1994, TPV-VESA 006842-6867.
- DDC Application No. dated Sep. 12, 1994, TPV-VESA 005683-5690 TPV-VESA 033439-3442.
- DDC Proposal, Version 1.0p, Revision 0.50, dated Mar. 2, 1994, TPV-VESA 027211-7245.
- DDC Proposal, Version 1.0p, Revision 0.64p, dated Jun. 10, 1994, TPV-VESA 027428-7456.
- DDC Discussion Paper, Revision 0.1p, dated Jul. 8, 1993, TPV-VESA 008431-8444.
- DDC Standard, Version 1.0, Revision 0, dated Aug. 12, 1994, TPV-VESA 033606-3630.
- Letter from Tom Ryan, dated Dec. 2, 1992, TPV-VESA 033519.
- Misc. document entitled "Master Meeting Schedule," no author or date, TPV-VESA 033520-3521.
- VESA presentation, dated Nov. 15, 1992, TPV-VESA 033522-3597.
- VESA presentation, dated Nov. 15, 1992, TPV-VESA 003812-3884.
- Letter from Tom Ryan with VESA presentation, dated Mar. 16, 1993, TPV-VESA 003162-3231.
- "Display Controller Set up as a Function Display Monitor Type, Display Jumper Settings and Amount of Vram," IBM Technical Disclosure Bulletin, vol. 33, No. 2, pp. 352-353, Jul. 1990, see file history.
- "Interface for Color-Video Monitor," NASA Tech. Brief, pp. 246-247, Apr. 1988, see file history.
- "Access.bus, an Open Desktop Bus", Peter A. Sichel, Digital Technical Journal, vol. 3, No. 4, Fall 1991.
- Barco n.v Video & Communications, The Calibrator Explained, Part 1, Apr. 1990, pp. 1-40.
- Fernseh-und Kinotechnische Gesellschaft e. V., Tagungsband, 10. Jahrestagung vom 13. bis 17. Sep. 1982, pp.153-167.
- Floyd, Digital Fundamentals, 3<sup>rd</sup> Ed., 1990, pp. 600-602.
- The I-C Bus and How to Use It, Philips Semiconductors, Jan. 1992.
- Wischermann, G., "Verfahren zur Bildkompression und Bildexpansion", FKTG, 10<sup>th</sup> Annual Mtg., Munich, Sep. 13-17, 1982, pp. 153-167 (including translation).
- Hon Hai Precision Industry Co. Ltd.'s Answer and Counterclaims, Apr. 14, 2008.
- Innolux Display Corporation's Answer and Counterclaims, Apr. 14, 2008.
- LG Electronics, USA, Inc.'s Answer and Counterclaims, Apr. 14, 2008.
- U.S. Appl. No. 10/661,527, Office Action, Nov. 16, 2007.
- U.S. Appl. No. 10/661,527, Amendment, May 16, 2008.
- U.S. Appl. No. 10/832,442, Office Action, Sep. 26, 2007.
- U.S. Appl. No. 10/832,442, Amendment, Mar. 25, 2008.
- U.S. Appl. No. 11/176,880, Office Action, Nov. 2, 2007.
- U.S. Appl. No. 11/176,880, Amendment, Mar. 25, 2008.

\* cited by examiner

FIG. 1

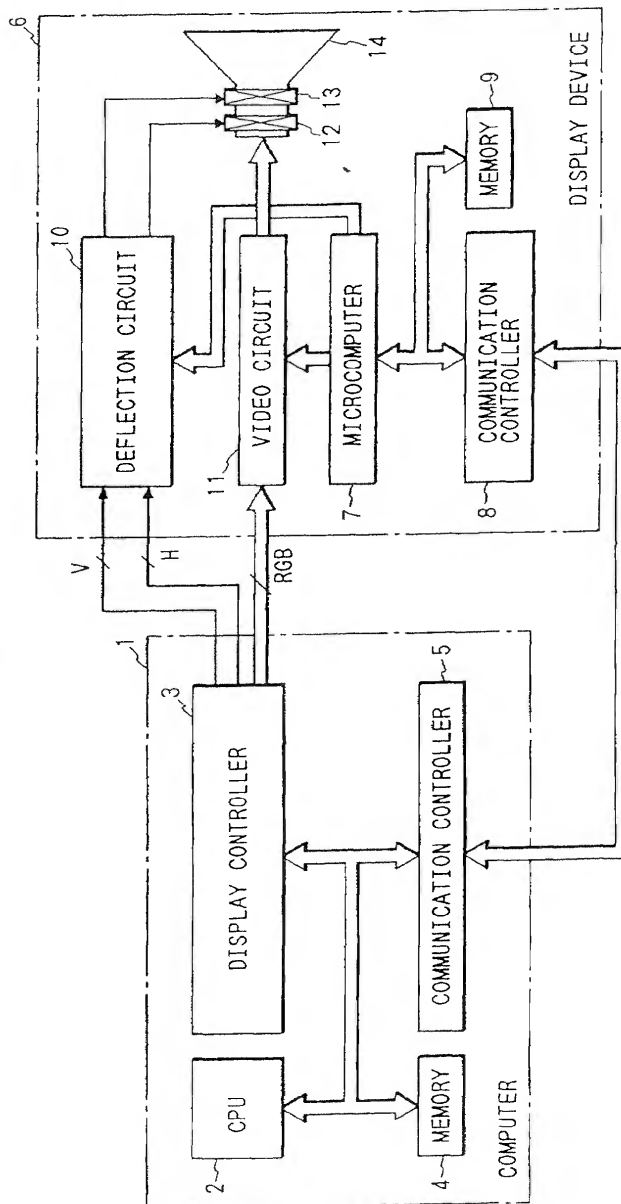




FIG. 2

ADDRESS 1	NUMBER OF DATA SET	REGISTERED ID NUMBERS
ADDRESS 2	DATA AREA 1 FOR DELIVERY ADJUSTMENT	
ADDRESS 3	DATA AREA 2 FOR DELIVERY ADJUSTMENT	
⋮	⋮	
ADDRESS i	ADJUSTMENT DATA AREA 1 FOR USER	
ADDRESS i+1	ADJUSTMENT DATA AREA 2 FOR USER	
⋮	⋮	

FIG. 3

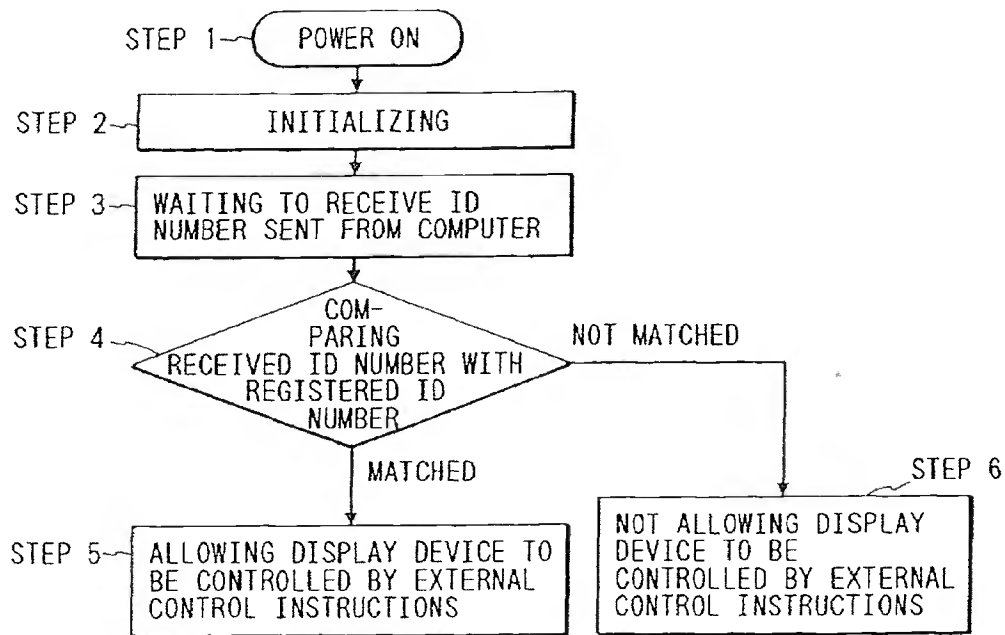


FIG. 4

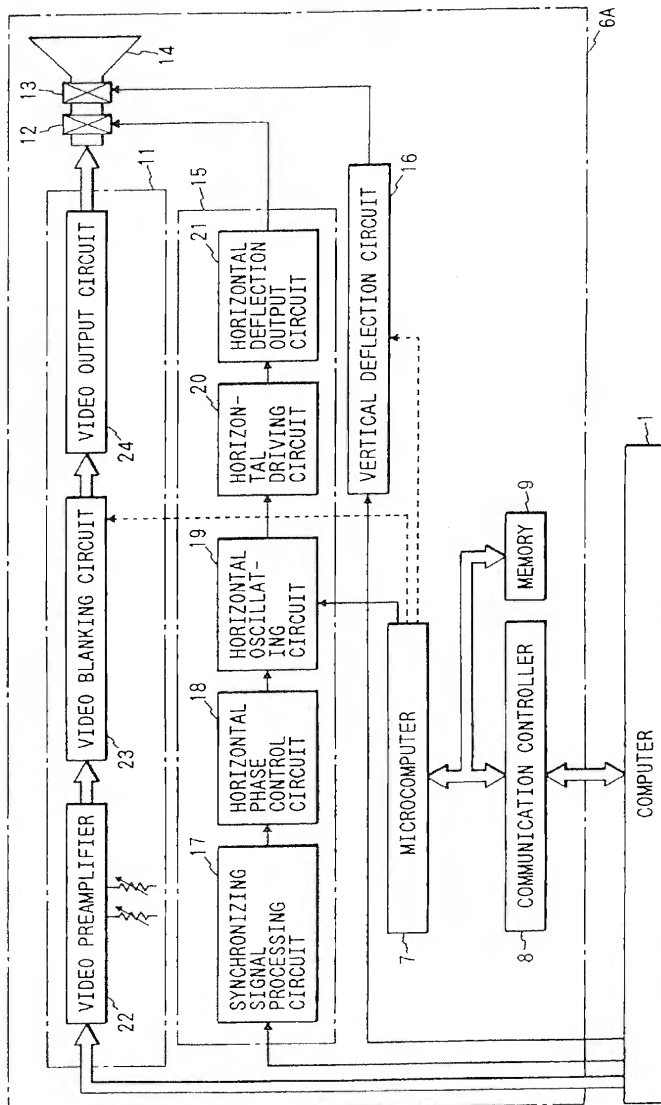


FIG. 5

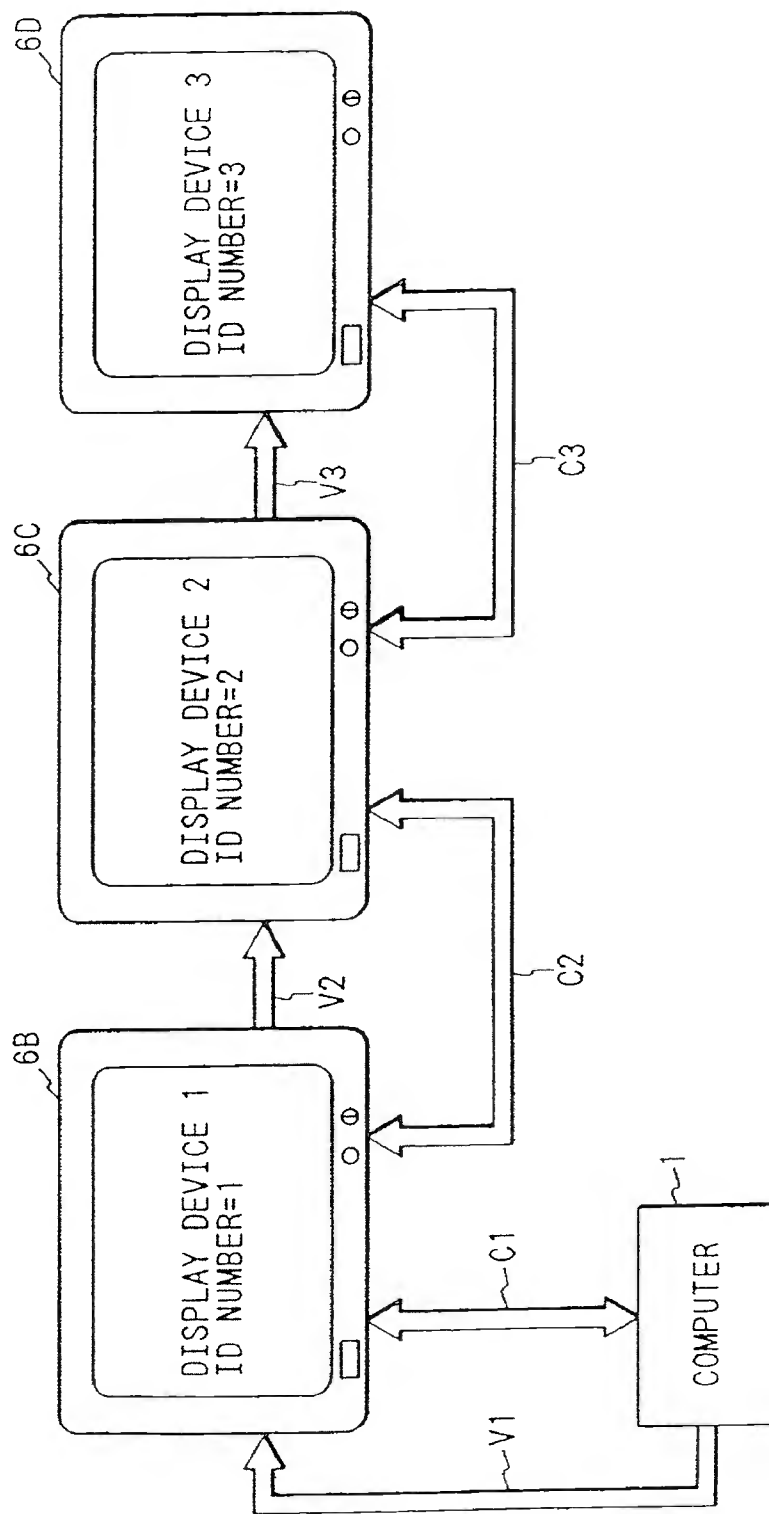


FIG. 6

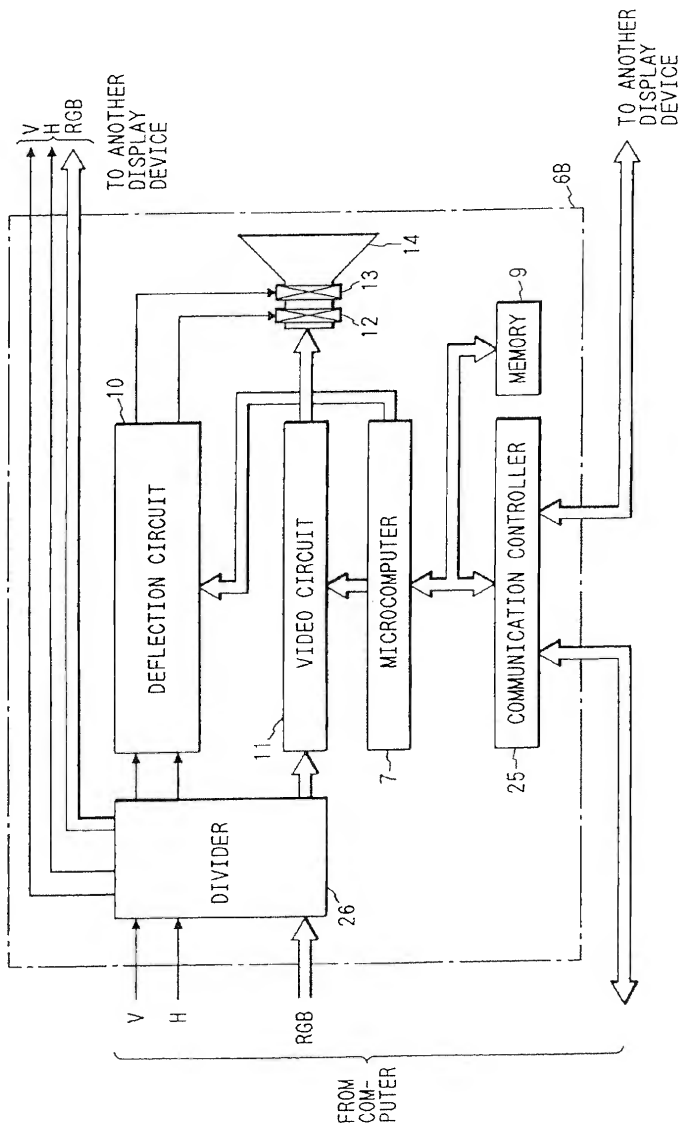


FIG. 7

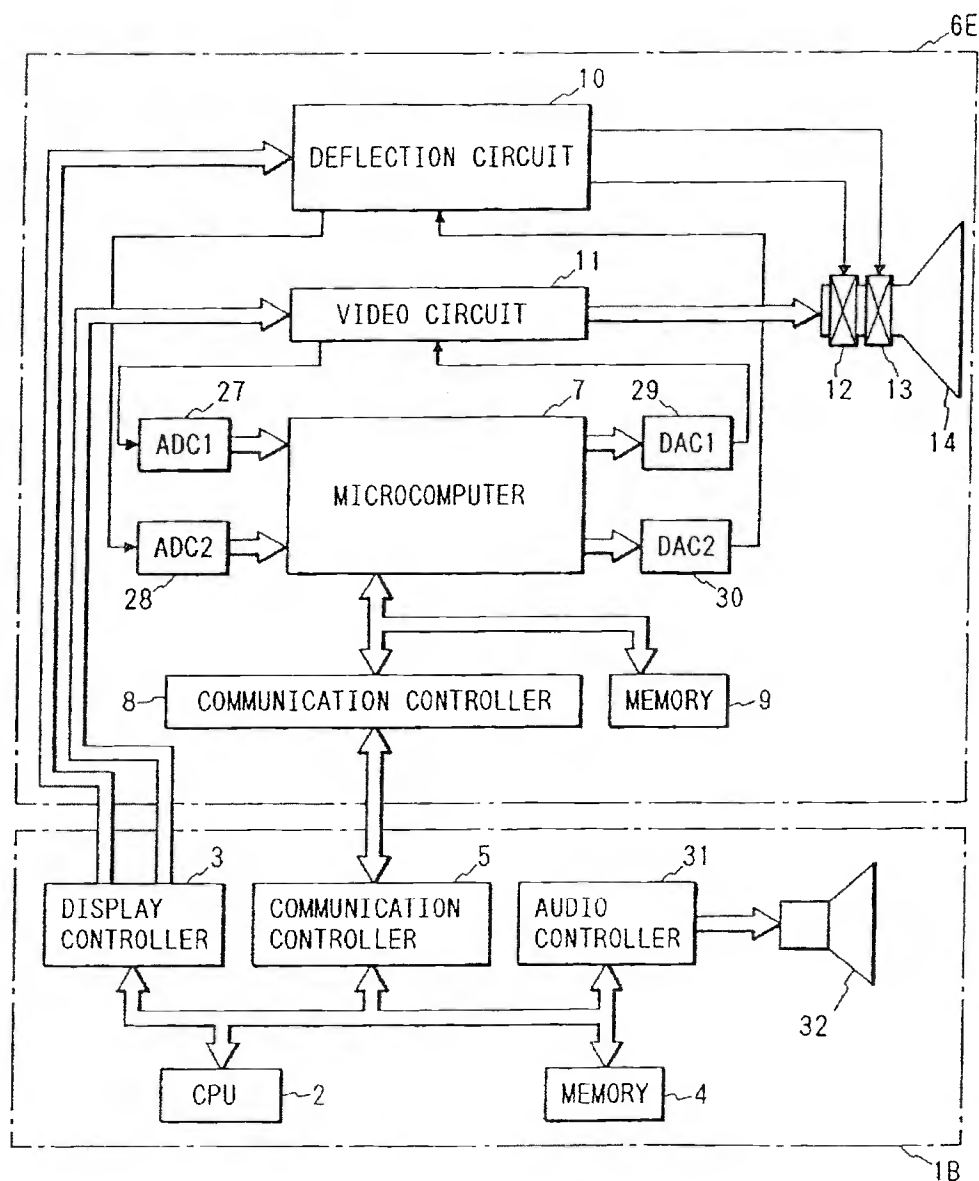


FIG. 8

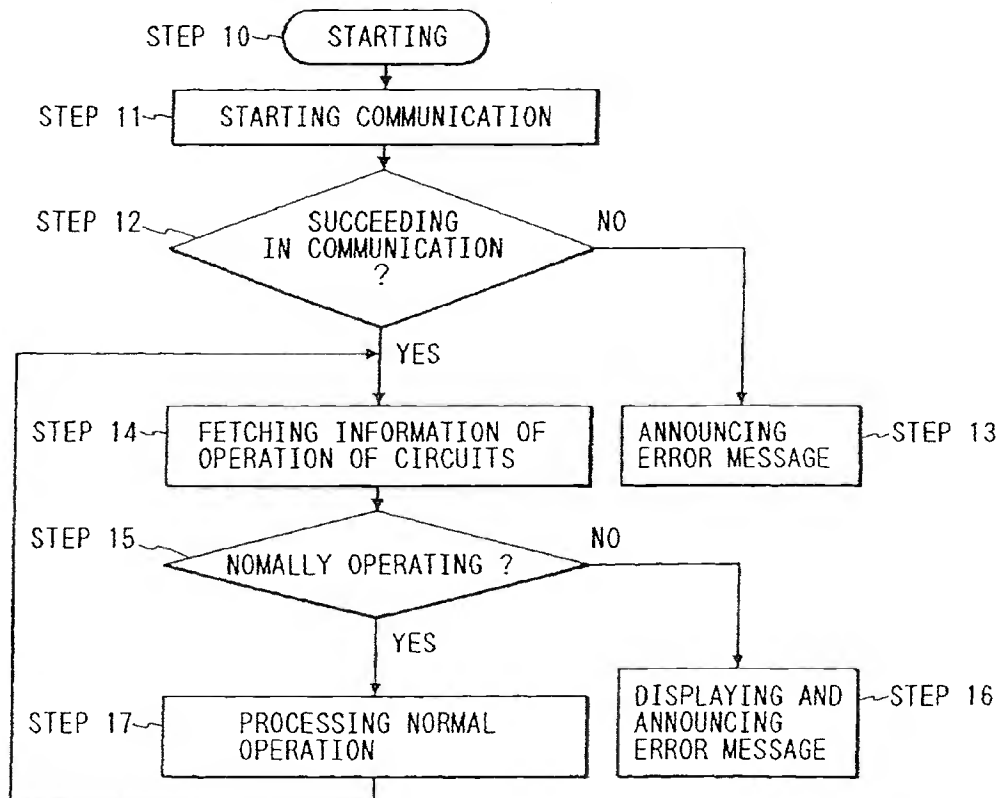


FIG. 9

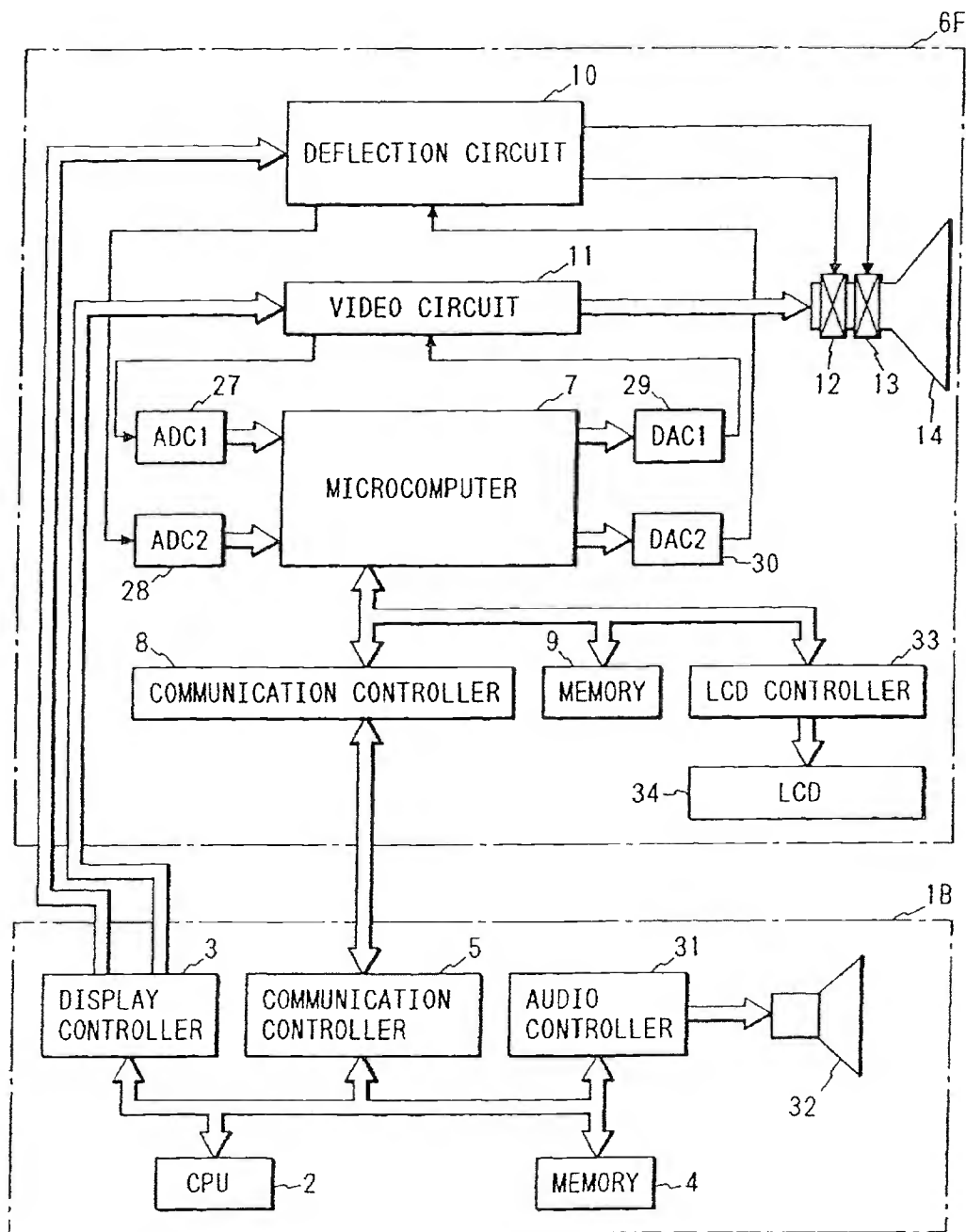




FIG. 10

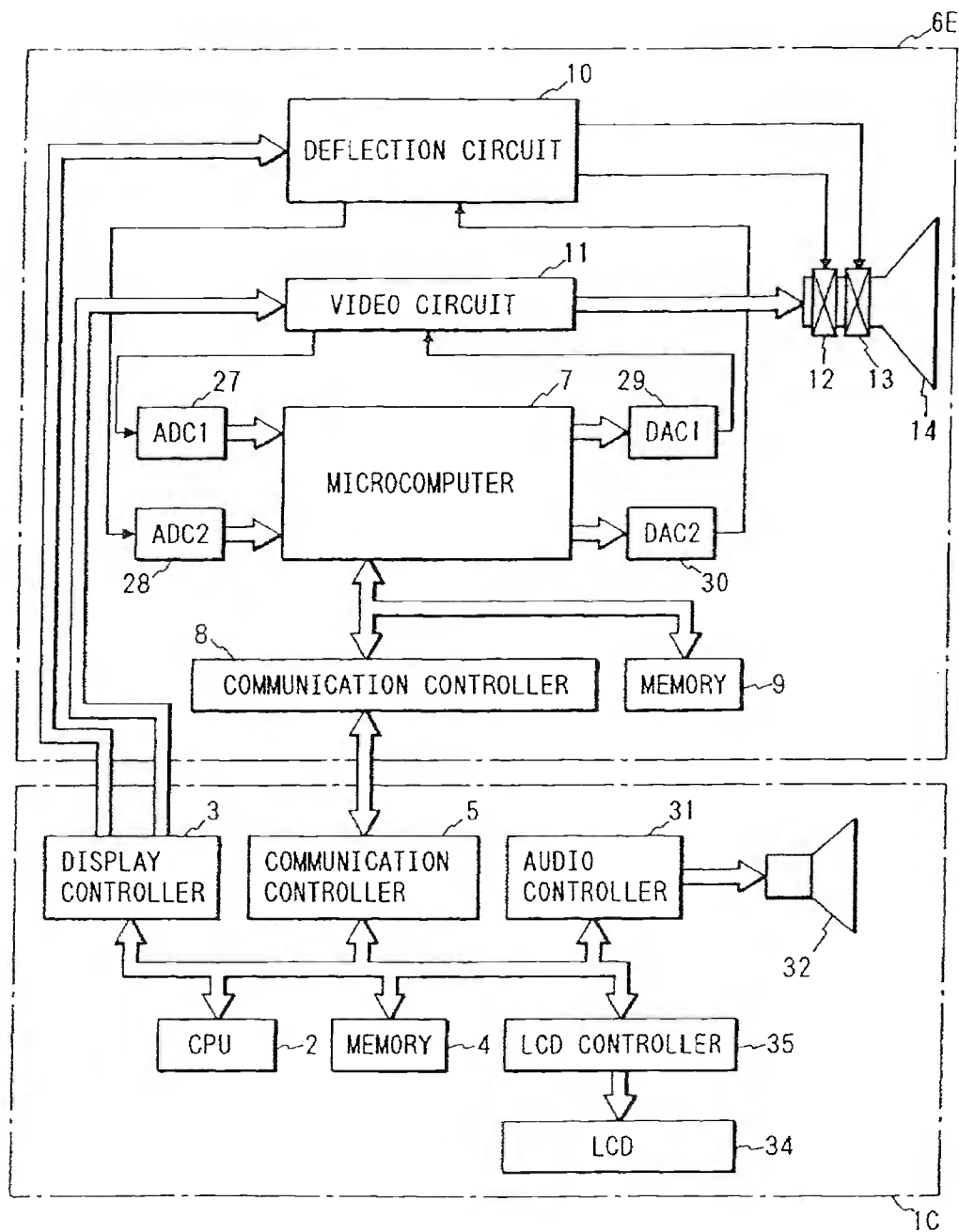


FIG. 11

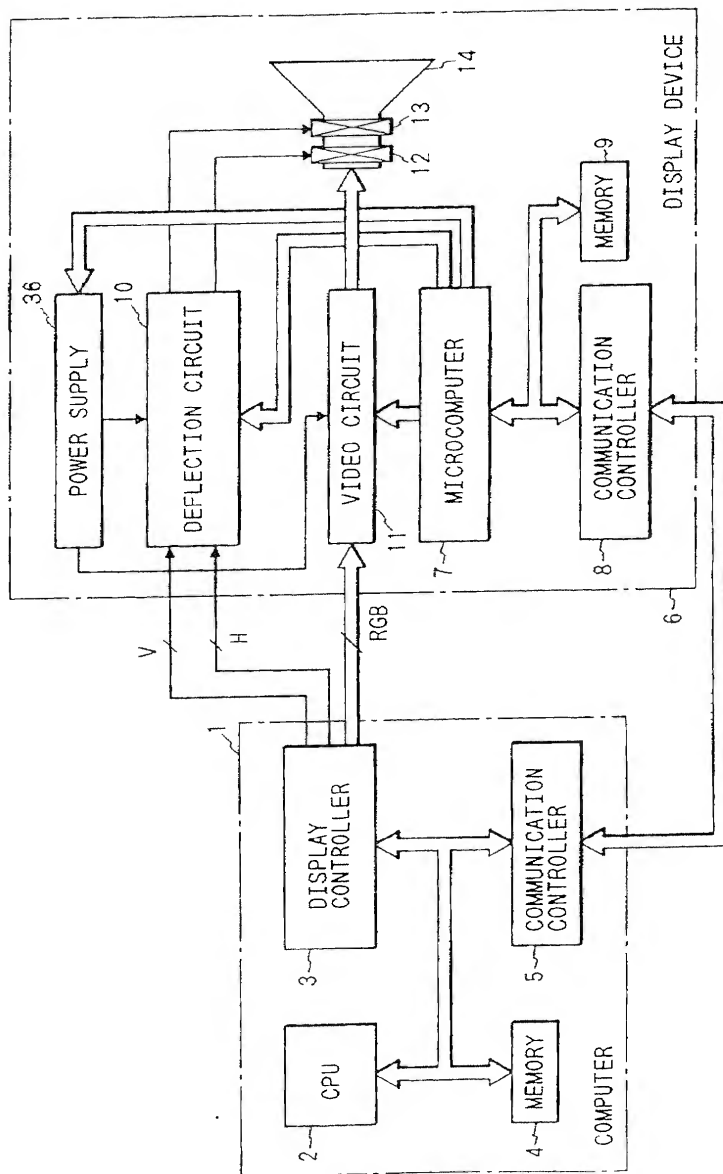
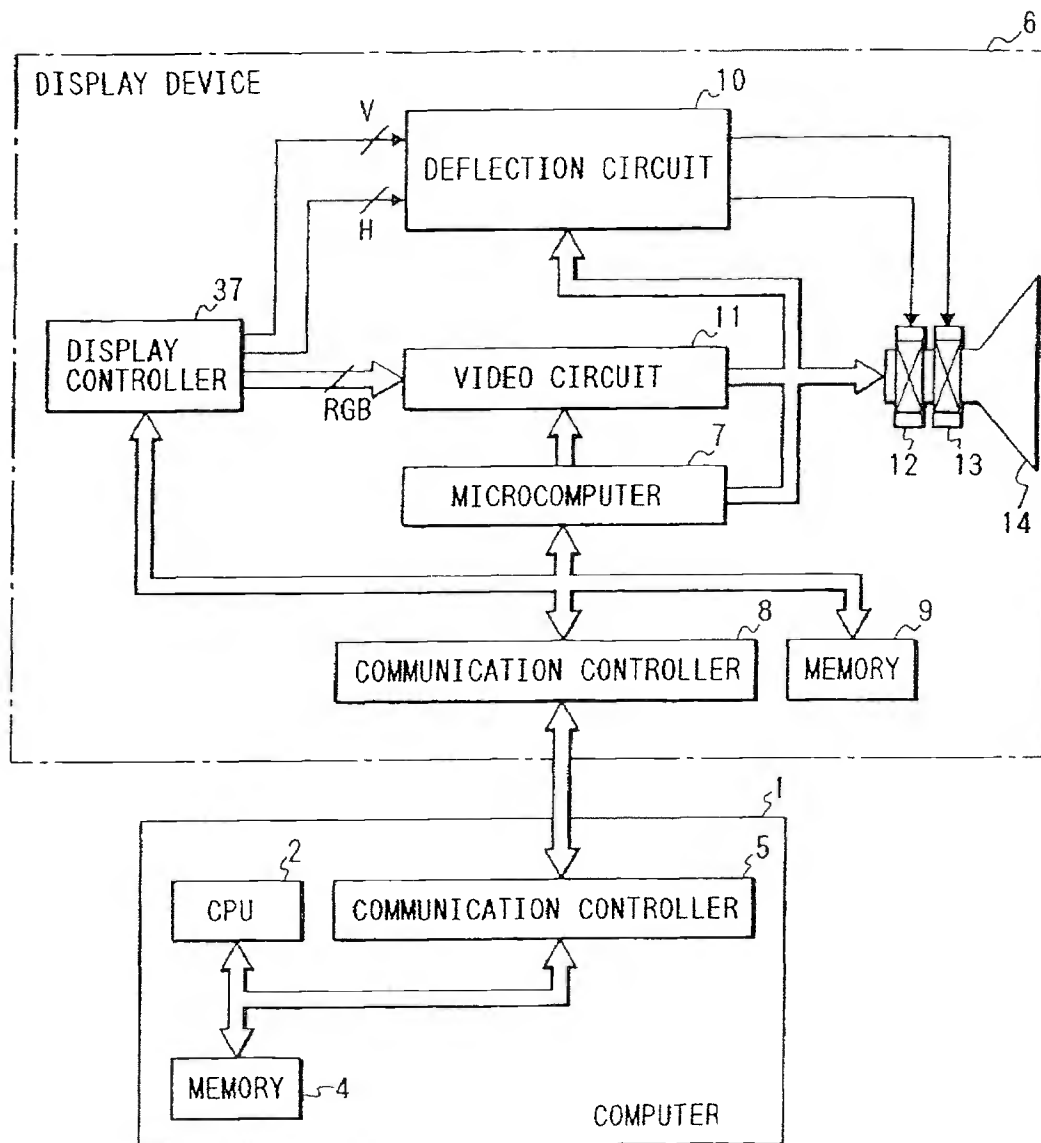


FIG. 12



# DISPLAY UNIT WITH COMMUNICATION CONTROLLER AND MEMORY FOR STORING IDENTIFICATION NUMBER FOR IDENTIFYING DISPLAY UNIT

## CROSS REFERENCE TO RELATED APPLICATION

This is a continuation of U.S. application Ser. No. 09/732,292, filed Dec. 8, 2000, now U.S. Pat. No. 6,513,088, issued Jan. 28, 2003, which is a continuation of U.S. application Ser. No. 09/265,363, filed Mar. 10, 1999, now U.S. Pat. No. 6,247,090, issued Jun. 12, 2001, which is a continuation of U.S. application Ser. No. 08/833,346, filed Apr. 4, 1997, now U.S. Pat. No. 5,887,147, issued Mar. 23, 1999, which is a continuation of U.S. application Ser. No. 08/598,903, filed Feb. 9, 1996, now U.S. Pat. No. 5,652,845, issued Jul. 29, 1997, which is a continuation of U.S. application Ser. No. 08/190,848, filed Feb. 3, 1994, now abandoned, the subject matter of which is incorporated by reference herein, and is related to U.S. application Ser. No. 09/732,291, filed Dec. 8, 2000, now U.S. Pat. No. 6,549,970, issued Apr. 15, 2003.

## BACKGROUND OF THE INVENTION

The present invention relates to an information output system or display apparatus including a computer and an information output device such as a display device or a printer as a computer terminal and more particularly to an information output system or display apparatus for performing various types of control such as the information output method and allowing or not allowing of information output from the computer connected to the above information output device via a communication interface.

In current display devices as computer terminals, a wide variety of display positions and sizes on the screen and video signal frequencies to be displayed are used depending on video signals to be inputted. Therefore, a display or a so-called multi-scan display has been used so that a display device can handle various video signals.

A microcomputer or a memory LSI is used to provide a most suitable display image for each video signal as this type of display device. Such a prior art is indicated in Japanese Patent Application Laid-Open No. 1-321475.

According to this prior art, the microcomputer controls the memory which stores information of the display position and size on the screen for each video signal beforehand and reads the information of the most suitable display position and size on the screen depending on the input video signal from the memory. The microcomputer outputs a control signal on the basis of the read information. This control signal is applied to the deflection circuit as a control voltage or control current through a D-A converter so as to control the voltage or current at a predetermined part of the deflection circuit. By doing this, the display size and position of the display device can be adjusted. When a video signal inputted to the display device is not a known signal, no corresponding information is kept in the above memory. Therefore, the switch mounted on the front of the display device is operated so as to input the adjustment information of the display position and size on the screen. The control circuit of the above microcomputer creates deflection control information on the basis of the above input information and adjusts the display position and size.

According to the aforementioned prior art, the display device obtains a most suitable screen display according to the input video signal. However, according to another prior art, the computer controls and changes the display status. Such a

prior art is indicated in Japanese Patent Application Laid-Open No. 61-84688. According to this prior art, a discrimination pulse is superimposed at the blanking interval of a video signal outputted from the computer and the deflection frequency of the display device is changed on the basis of this discrimination pulse.

According to the former prior art among the aforementioned prior arts, the control of the display position and size on the screen is managed by the display device. Therefore, when adjustment is required or requested from the user of display device, it is necessary to perform manual adjustment using the adjustment switch of the display device each time and it is rather troublesome to operate the system.

According to the latter prior art among the aforementioned prior arts, the control can be operated by the computer. However, since the operation is such that the deflection frequency is simply changed on the basis of the discrimination pulse superimposed on the video signal, an image cannot be adjusted to the display image (display position and size) which is required by a user of the computer. Namely, there is a problem imposed that the status which is simply desired by the user cannot be obtained. Furthermore, no consideration is given to prevention of display (indication) of careless images (information) and restraining of unnecessary power consumption. Even if the discrimination pulse is superimposed at the blanking interval of the video signal, the video blanking level is generally shallow in the case of the display device, so that the discrimination pulse is displayed. Furthermore, the control is applied only in one direction from the computer to the display device and no information is sent in the reverse direction, so that there is another problem imposed that a malfunction cannot be avoided.

## SUMMARY OF THE INVENTION

An object of the present invention is to provide an information output system wherein a computer can exercise various types of control of an information output device such as a display device. Another object of the present invention is to provide an information output system for maintaining secrecy of information and for restraining power consumption. A further object of the present invention is to provide an information output system for informing the computer of the operation status of the information output device so as to allow easy maintenance.

To accomplish the above objects, according to the present invention, in an information output system consisting of at least a computer and an information output device, the computer is equipped with a first communication means and the information output device is equipped with a second communication means. Furthermore, a control processing means and a memory means for storing the identification number of the computer beforehand are added to the information output device, or a memory means for storing the identification number of the information output device beforehand is mounted in the computer in addition to the first communication means. The above second communication means has a plurality of communication interfaces. Furthermore, a detection means for detecting the internal operation status and a control processing means for judging the detection result are added to the information output device and an audio output means for outputting the operation status in voice is added to the computer. A second display means for displaying the operation status is mounted in the information output device. Or, a display means for displaying the operation status of the information output device is mounted in the computer.

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The first communication means in the computer controls communication with the information output device and the second communication means in the information output device controls communication with the computer. The control processing means operates and generates control signals for exercising various types of control for the information output device on the basis of control instructions from the second communication means and compares the identification number of the computer stored in the memory means with the identification number sent from the computer via the first and second communication means. When a comparison result match occurs, the control processing means controls a predetermined part in the information output device.

In the memory means mounted in the computer, the identification number for identifying the information output device is stored beforehand. When the identification number which is sent from the information output device via the second and first communication means matches with the identification number which is stored in the memory means beforehand, the computer communicates with the information output device.

When no comparison result match occurs, the above control processing means controls so that information which is sent from the computer to the information output device is not normally outputted from the information output device. By doing this, information of a computer user will not be indicated carelessly.

When the second communication means has a plurality of communication interfaces, it can communicate with another plurality of information output devices and the computer and in the state that a plurality of similar information output devices are connected to the computer, it can exercise various types of control for the information output devices and can inform the computer of the status of each information output device.

The detection means detects the internal operation status of the information output device and the control processing means judges the detection result. The audio output means indicates the operation status of the information output device in voice on the basis of the judgment result which is sent from the information output device to the computer via the second and first communication means. Furthermore, the display means mounted in the information output device displays the above operation status. The display means mounted in the computer performs the same operation as that of the display means mounted in the information output device. In this case, information which is sent to the computer via the second and first communication means is used as display information.

#### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a block diagram showing the first embodiment of the present invention.

FIG. 2 is a memory map showing the contents of the memory in the display device shown in FIG. 1.

FIG. 3 is a flow chart showing the operation of the essential section shown in FIG. 1.

FIG. 4 is a block diagram showing the second embodiment of the present invention.

FIG. 5 is a block diagram showing the third embodiment of the present invention.

FIG. 6 is a block diagram showing the internal structure of the display device 6B shown in FIG. 5.

FIG. 7 is a block diagram showing the fourth embodiment of the present invention.

FIG. 8 is a flow chart showing the operation outline shown in FIG. 7.

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FIG. 9 is a block diagram showing the fifth embodiment of the present invention.

FIG. 10 is a block diagram showing the sixth embodiment of the present invention.

FIG. 11 is a block diagram showing the seventh embodiment of the present invention.

FIG. 12 is a block diagram showing the eighth embodiment of the present invention.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The embodiments of the present invention will be explained with reference to the accompanying drawings hereunder.

FIG. 1 is a block diagram showing the first embodiment of the present invention. In the drawing, a section 1 enclosed by a chained line indicates a computer. In the section 1, a reference numeral 2 indicates a CPU (central processing unit), 3 a display controller for generating various signals for video display, 4 a memory, and 5 a communication controller for communicating with peripheral devices. In addition, a magnetic recording unit is mounted as a data storage device which is not shown in the drawing.

A section 6 enclosed by another chained line indicates a so-called multi-scan display device which can be applied to various video signal specifications. In the section 6, a reference numeral 7 indicates a microcomputer for controlling display of the display device 6, 8 a second communication controller for communicating with the above communication controller 5, 9 a second memory, 10 a general deflection circuit of the display device, 11 a video circuit of the display device, 12 a horizontal deflection yoke, 13 a vertical deflection yoke, and 14 a color cathode-ray tube (hereinafter called a CDT (color display tube)) for displaying color images.

The operation shown in FIG. 1 is as shown below. The computer 1 has a structure which is the same as the general structure of a conventional personal computer or work station and the communication controller 5 controls a communication interface such as RS-232C which is installed in the standard type. When a control instruction of the display device 6 is inputted firstly by a user of the computer from a general keyboard which is not shown in the drawing of the computer 1, it is coded digitally by a keyboard controller which is neither shown in the drawing and CPU 2 identifies the instruction and controls the communication controller 5. The communication controller 5 sends the control instruction of the display device to the display device 6. When a control instruction of the display device 6 which is included in the software for allowing the computer 1 to operate is read from the external storage device such as a floppy disk drive or hard disk drive which is not shown in the drawing, CPU 2 identifies the instruction and controls the communication controller 5. The communication controller 5 also sends the control instruction of the display device to the display device 6.

Next, the display device 6 sends the control instruction from the computer 1 which is received by the communication controller 8 to the microcomputer 7. The microcomputer 7 identifies this control instruction and generates control signals to the relevant portions to be adjusted in the deflection circuit 10 or video circuit 11. The aforementioned deflection circuit 10 and video circuit 11 can be adjusted in the same way as with a conventional multiscan display and the adjustment means has a structure which is the same as that of a conventional multiscan display. By doing this, the display size and

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position, brightness, contrast, and hue of images displayed on the CDT 14 are made most suitable to a user of the computer system.

Furthermore, WYSIWYG (what you see is what you get) control which makes an image displayed on the display device 6 similar to print output of an output device other than the display, for example, a printer can be realized only by sending a control instruction for changing the display position and size to the display device 6 instead of operating and generating display data by the computer 1. The interface part of the above display device 6 such as the communication control terminal is mounted on the back or side of the display device from a viewpoint of easy connection to the computer 1 and appearance.

Furthermore, the aforementioned communication function is used for adjustment at a factory. In this case, necessary information is all written into the memory 9 in the display device 6. FIG. 2 is a memory map showing the contents of the memory 9 in the display device 6. For adjustment at factory, data to be written can be all set. In a case other than factory adjustment, namely, for adjustment in a system as shown in FIG. 1, to prevent data requiring no rewriting, namely, preset values at factory such as, for example, the number of all data or the data within the corresponding frequency range from being erased by mistake or rewritten, the computer 1 sends the ID number and the microcomputer 7 in the display device 6 checks the ID number with the registered ID number stored in the memory 9.

A flow chart of this check is shown in FIG. 3. As shown in the drawing, when the computer 1 and display device 6 are turned on at Step 1, each device is initialized at Step 2. Concretely, CPU 2 and the microcomputer 7 read the starting system software and put the peripheral circuit to be connected to the CPU into the active state so that the next operation can be performed. Then, at Step 3, the microcomputer 7 in the display device 6 waits for sending of the identification number assigned to the computer 1, that is, the so-called ID number from the computer 1. Next, at Step 4, the microcomputer 7 receives the ID number which is sent from the computer 1 and checks whether the received ID number is registered in the registered ID number list which is stored in the memory 9 in the display device 6.

When it is registered, at Step 5, the computer 1 is allowed to control the display device 6 by external control instructions so that the user control of the display size, position, brightness, and contrast can be performed by control instructions sent from the computer 1 thereafter. On the other hand, when the received ID number is not registered in the memory 9, at Step 6, the display device 6 is not allowed to be controlled by external control instructions thereafter. Therefore, even if any control instruction is sent from the computer 1, the display device 6 will not accept it.

Or, at Step 5, the computer 1 may be allowed to perform all the adjustments which can be performed by the display device 6, that is, the same control as that for adjustment at factory and at Step 6, a part of the control of the display device 6 such as display control may be allowed.

By doing this, the display device 6 can be prevented from careless control.

The above is an example that an ID number is sent to the display device 6 from the computer 1. However, needless to say, the reverse case of the above is possible. Namely, an ID number is sent to the computer 1 from the display device 6 so that the computer 1 identifies that the display device 6 having a communication function is connected and the computer 1 compares the ID number with the ID number registered in the computer 1. When the corresponding ID number is registered,

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the computer 1 controls the display device 6 by a predetermined control instruction. When it is not registered, the computer 1 judges that it cannot control the display device 6 and will not control the display device 6.

By doing this, the computer 1 communicates with a specific display device 6 and can exercise control such as changing the color temperature of an image displayed on the display device 6 or changing the display size depending on the application software.

According to this embodiment, RS-232C is used as a communication interface. However, a general-purpose interface such as RS-422, RS-423, SCSI or GP-IB, or network interface may be used. Furthermore, the embodiment may be applied to an interface using optical signals instead of electric signals. The above interface may be installed in the neighborhood of the rear cabinet or lower pedestal of the display device 6 for convenience of a user.

FIG. 4 is a block diagram showing the second embodiment of the present invention. According to this embodiment, when the ID number sent from the computer to the display device is not registered in the memory 9, another operation which is different from the operation shown in the first embodiment is performed. Namely, according to this embodiment, when the ID numbers do not match with each other, nothing is displayed on the display device so as to enhance the secrecy of information.

Next, the structure of FIG. 4 will be explained. In the drawing, a reference numeral 6A indicates another display device which is different from the display device 6 shown in FIG. 1, 15 a horizontal deflection circuit, 16 a vertical deflection circuit, 17 a synchronizing signal processing circuit, 18 a horizontal phase control circuit, 19 a horizontal oscillating circuit, 20 a horizontal driving circuit, 21 a horizontal deflection output circuit, 22 a video pre-amplifier circuit, 23 a video blanking circuit, and 24 a video output circuit. The other reference numerals which are the same as those shown in FIG. 1 indicate the same functions. The video circuit 11 is a general video circuit consisting of the video pre-amplifier circuit 22, video blanking circuit 23, and video output circuit 24. The horizontal deflection circuit 15 is a general deflection circuit consisting of the synchronizing signal processing circuit 17, horizontal phase control circuit 18, horizontal oscillating circuit 19, horizontal driving circuit 20, and horizontal deflection output circuit 21. The vertical deflection circuit 16 is also a general circuit which has a structure similar to that of the horizontal deflection circuit 15.

Next, the operation shown in FIG. 4 will be explained. In the drawing, an ID number sent from the computer 1 is inputted into the microcomputer 7 via the communication controller 8. The microcomputer 7 checks the above ID number with the ID number stored in the memory 9. When the ID number stored in the memory 9 matches with the ID number sent from the computer 1, the microcomputer 7 receives the control from the computer 1.

On the other hand, when the check results do not match with each other, the microcomputer 7 controls the horizontal oscillating circuit 19, fixes the oscillation frequency to a predetermined value, and allows the display device 6A to perform a horizontal deflection operation at a value different from the horizontal frequencies of the video signal and synchronizing signal which are sent from the computer. Therefore, the image displayed on the CDT 14 is not synchronized horizontally in this case and the screen content cannot be judged. When the vertical deflection circuit 16 is controlled in the same way, the image displayed on the CDT 14 is not synchronized vertically on the screen. By controlling the

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video blanking circuit 23 of the video circuit 11, the video display period may be blanked so that no image is displayed on the CDT 14.

By using the aforementioned methods independently or combined, only when a user of the computer system enters a predetermined ID number from the keyboard, it is displayed correctly on the display device 6A and information displayed on the CDT 14 can be prevented from careless indication.

FIG. 5 is a block diagram of the third embodiment of the present invention. According to this embodiment, the display device is provided with a plurality of communication functions and a plurality of display devices can be connected with the communication interface. In the drawing, reference numerals 6B, 6C, and 6D indicate display devices having the same structure, V1, V2, and V3 lines for video signals and synchronizing signals, C1, C2, and C3 communication lines for, for example, RS-232C, and 1 the aforementioned computer. Each of the display devices 6B, 6C, and 6D has a plurality of video signal I/O terminals and communication interface I/O terminals and a registered ID number. According to this embodiment, as shown in FIG. 5, 1 is assigned to the display device 6B as an ID number, 2 to the display device 6C as an ID number, and 3 to the display device 6D as an ID number.

Next, the operation shown in FIG. 5 will be explained. In the drawing, for example, when controlling the display device 6B from the computer 1, the ID number 1 is sent to the line C1 and the display device 6B is controlled appropriately from the computer 1. Next, when controlling the display device 6C, the ID number 2 is sent from the computer 1 in the same way. Then, the ID number is received by the display device 6C via the lines C1 and C2 and the display device 6C can be controlled appropriately from the computer 1.

Since a plurality of display devices can be controlled by a computer in this way, a plurality of display devices can be adjusted at a time, for example, at the time of delivery adjustment at a factory. Furthermore, by using a multi-display system for displaying an image by assembling a plurality of display devices and for displaying various images on each screen, the display devices can be hued and adjusted in brightness simply.

FIG. 6 is a block diagram showing the internal structure of the display device 6B shown in FIG. 5. In the drawing, a reference numeral 25 indicates a communication controller having two communication ports and 26 a divider of video signals and synchronizing signals. The communication controller 25 sends or receives data to or from the computer 1 in the same way as the communication controller 8 of the display device 6 shown in FIG. 1 and also divides the communication lines and relays other display devices. On the other hand, the divider 26 divides video signals or synchronizing signals sent from the computer 1 or signal source to other display devices. By using such a structure, a plurality of display devices can be connected to a computer as shown in FIG. 5.

Next, the fourth embodiment of the present invention will be described. FIG. 7 is a block diagram showing the fourth embodiment of the present invention. In the drawing, a reference numeral 1B indicates a computer, 31 an audio control circuit for producing a sound, 32 a speaker, 6E a display device, 27 and 28 analog-digital converters (hereinafter abbreviated to ADC), and 29 and 30 digital-analog converters (hereinafter abbreviated to DAC). The other reference numerals which are the same as those shown in FIG. 1 indicate the same functions. The operation of FIG. 7 will be explained hereunder with reference to the operation flow chart shown in FIG. 8.

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When the computer 1B and display device 6E are started at Step 10 as shown in FIG. 8, they start communication with each other via the communication controllers 5 and 8 at Step 11 next. Then, at Step 12, the computer 1B calls the display device 6E. When no response is received, the computer 1B judges that the display device 6E is faulty, starts the audio control circuit 31 at Step 13, and informs the user of the computer 1B that the display device 6E is faulty from the speaker.

When the communication succeeds, at Step 14, the microcomputer 7 fetches information of the operation status of the deflection circuit 10 or video circuit 11 in the display device 6E from the voltage at a predetermined part in the circuit as digital information via the ADCs 27 and 28. Next, at Step 15, the microcomputer 7 judges whether the value which is fetched at Step 14 is a value in the normal operation status. When the microcomputer 7 judges it as an error, it informs the computer 1B of the faulty value via the communication controller 8 and CPU 2 of the computer 1B allows the audio control circuit 31 to operate and generates a message informing an error of the display device 6E from the speaker 32. Furthermore, CPU 2 allows the display controller 3 to operate and displays also a message informing an error on the CDT 14 via the video circuit 11.

In this case, when an indication code informing the faulty part is sent to the computer 1B from the display device 6E simultaneously, the computer 1B judges the indication code and can inform the user or a customer engineer of the display device 6E of the faulty part by sound or display.

When the display device 6E is normal at Step 15, the computer 1B can exercise the communication control such as the display size, hue, and brightness of the display device 6E at Step 17. At this step, when a control instruction is sent to the display device 6E from the computer 1B, the microcomputer 7 decodes the instruction and outputs the control code to the corresponding DAC 29 or 30. The DAC 29 or 30 controls a predetermined control part at the DC control voltage corresponding to the above control code and controls the display size, position, and hue of the image displayed on the CDT 14. When the above series of operations ends, the computer 1B returns to Step 14 and repeats the operations from the monitor mode of a faulty operation of the display device 6E to the normal operation at Step 17.

As mentioned above, the computer 1B can be informed of a faulty operation by using the communication function of the display device 6E. Therefore, the user can judge the faulty part and can maintain the system easily.

FIG. 9 is a block diagram showing the fifth embodiment of the present invention. This embodiment obtains the same effect as that of the embodiment shown in FIG. 7. In FIG. 9, a reference numeral 6F indicates a display device, 33 a liquid crystal display controller in the display device 6F, and 34 a liquid crystal display panel mounted in the display device 6F. The other reference numerals which are the same as those shown in FIGS. 1 and 7 indicate the same functions.

The operation shown in FIG. 9 is basically the same as that shown in FIG. 7. The operation of the deflection circuit or video circuit 11 is monitored by the microcomputer 7 via the ADC 27 or 28. When an error occurs, the microcomputer 7 transmits an indication code informing the occurrence of an error to the computer 1B via the communication line and informs the user of it by voice from the speaker 32.

Furthermore, the microcomputer 7 allows the liquid crystal display controller 33 in the display device 6F to operate and displays information of the occurrence of the fault and faulty

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part on the liquid crystal display panel 34. By doing this, information when an error occurs in the display device 6F can be obtained more surely.

FIG. 10 is a block diagram showing the sixth embodiment of the present invention. This embodiment obtains the same effect as that of the embodiment shown in FIG. 9. In FIG. 10, a reference numeral 1C indicates a computer and 35 a liquid crystal display controller in the computer 1C. The other reference numerals which are the same as those shown in FIGS. 1 and 9 indicate the same functions. In FIG. 10, the display function for a fault and faulty operation of the display device shown in FIG. 9 is mounted in the computer 1C.

Namely, when an error occurs in the internal circuit of the display device 6E, the voltage detected by the ADC 27 or 28 is digitized and processed by the microcomputer 7 as faulty voltage occurrence information and information informing an error is transmitted to the computer 1C via the communication controller 8. In the computer 1C, CPU 2 decodes the transmitted faulty information. When CPU 2 identifies the faulty part of the display device 6E, it allows the audio control circuit 31 to operate as an audio signal and informs the user of the fault by an audio message from the speaker 32 on one hand. On the other hand, CPU 2 controls the liquid crystal display controller 35 so as to display characters or graphics on the liquid crystal display panel 34. By doing this, the user of the display device 6E can be informed of an error or fault of the display device 6E and can maintain the system easily.

FIG. 11 is a block diagram showing the seventh embodiment of the present invention. In the drawing, a reference numeral 36 indicates a power supply of the deflection circuit 10 and video circuit 11. The other reference numerals which are the same as those shown in FIG. 1 indicate the same functions.

Next, the operation shown in FIG. 11 will be explained.

In FIG. 11, when a control instruction to the display device 6 is issued from CPU 2 of the computer 1, the communication controller 5 changes the control instruction to a one in the signal format suited to communication and sends it to the display device 6. The display device 6 returns the signal received by the communication controller 8 to the control instruction which can be identified by the microcomputer 7 and sends it to the microcomputer 7. The microcomputer 7 judges the control instruction and decides the part of a predetermined section in the display device 6 to be controlled.

When the control instruction relates to control of the power supply 36 and is an instruction for stopping power supply from the power supply 36 to the deflection circuit 10, or video circuit 11, or both circuits, the microcomputer 7 controls the power supply 36 so as to stop the above power supply. Therefore, the image display on the CDT 14 is also stopped.

By doing this, for example, when the computer 1 is not in operation for a predetermined period, the operation power supply for the display device 6 can be automatically put into the off state. Therefore, unnecessary power consumption can be restrained and the life span of the display device can be lengthened. The aforementioned is power supply off control. However, needless to say, power supply on control is also possible. Namely, in this case, when the computer 1 is turned on or the computer 1 is changed from the function stop state to the active state, the microcomputer 7, power supply 36, deflection circuit 10, and video circuit 11 perform the reverse operation of the aforementioned so that the display device automatically starts to display.

FIG. 12 is a block diagram showing the eighth embodiment of the present invention. In the drawing, a reference numeral 37 indicates a display controller and the other numerals which

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are the same as those shown in FIG. 1 indicate units performing the same functions as those shown in FIG. 1.

Next, the operation of FIG. 12 will be explained. In FIG. 12, video information is sent to the display device 6 from the communication controller 5 in addition to a control instruction of the display device 6 which is explained in the embodiment shown in FIG. 1. This video information is a digital signal in the same way as a signal which is inputted to the display controller 3 in the embodiment shown in FIG. 1. The communication controller 8 of the display device 6 sends video information among the received signals to the display controller 37. The display controller 37 performs an operation which is the same as that of the display controller shown in FIG. 1 and generates a video signal to be inputted to a general display. By doing this, also in the embodiment shown in FIG. 12, an effect which is the same as that shown in FIG. 1 can be obtained. Furthermore, in FIG. 12, since video information is transmitted via a communication interface which is connected between the computer 1 and display device 6, a video signal line which is conventionally necessary is not necessary.

According to the present invention, a user of a computer can exercise various types of control for an information output device such as a display device from the keyboard of the computer or by the software incorporated in the computer. Therefore, the operability of the computer system is improved so that the system can be used easily and the user can obtain a desired information output status easily.

When an identification number is set to each device, a value which is set by the above control will not be lost by a careless operation of a user. By setting an identification number for a specific user, the secret of information can be protected inversely. Since the power supply for the information output device can be controlled by the computer when necessary, unnecessary power consumption can be restrained.

Since the status of the information output device can be monitored simply, the system can be protected against a malfunction and maintained easily. Furthermore, the aforementioned control hardware can be realized in a minimum structure.

What is claimed is:

1. A display unit for displaying an image based on video signals and synchronization signals inputted from an externally connected video source, comprising:

a video circuit adapted to display an image based on the video signals sent by said externally connected video source;  
a memory which stores an identification number for identifying at least a type of said display unit; and  
a communication controller which sends said identification number stored in said memory to said video source; wherein said communication controller is capable of bi-directionally communicating with said video source.

2. The display unit according to claim 1, wherein said identification number stored in said memory is utilized for comparison with an identification number stored in said video source.

3. The display unit according to claim 1, wherein said identification number stored in said memory is utilized for executing a predetermined process in said video source in accordance with a result of comparison between said identification number and an identification number stored in said video source.

4. The display unit according to claim 1, wherein said identification number stored in said memory is utilized for executing a predetermined process in said video source based



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on a result of comparison of whether said identification number stored in said memory is an identification number stored in said video source.

5 The display unit according to claim 1, wherein said identification number stored in said memory is sent to said video source in response to power on of at least one of said display unit and said video source.

6 The display unit according to claim 2, wherein said identification number stored in said memory is sent to said video source in response to power on of at least one of said display unit and said video source.

7 The display unit according to claim 3, wherein said identification number stored in said memory is sent to said video source in response to power on of at least one of said display unit and said video source.

8 The display unit according to claim 4, wherein said identification number stored in said memory is sent to said video source in response to power on of at least one of said display unit and said video source.

9 The display unit according to claim 1, wherein said display unit receives a signal from said video source that is generated by using said identification number.

10 The display unit according to claim 1, wherein said display unit receives a signal from said video source that is generated in accordance with a result of comparison between said identification number stored in said memory and an identification number stored in said video source.

11 The display unit according to claim 1, said display unit receives a signal from said video source that is generated based on a result of comparison of whether said identification number stored in said memory is an identification number stored in said video source.

12 The display unit according to claim 1, further comprising a processor adapted to control display of said display unit.

13 The display unit according to claim 12, wherein said display unit information is sent to said video source in response to power on of at least one of said display unit and said video source.

14 A display unit for displaying an image based on video signals inputted from an externally connected video source, comprising:

a video circuit adapted to display an image based on the video signals sent by the externally connected video source;

a memory in which at least display unit information is stored, said display unit information including an identification number for identifying at least a type of said display unit and characteristic information of said display unit; and

a communication controller capable of bi-directionally communicating with said video source;

wherein said communication controller is capable of communicating said display unit information other than said characteristic information to said video source.

15 The display unit according to claim 14, wherein said display unit information is sent to said video source in response to power on of at least one of said display unit and said video source.

16 The display unit according to claim 14, wherein said display unit receives a signal from said video source that is generated by using said identification number stored in said memory.

17 A display unit for displaying an image based on video signals inputted from an externally connected video source, comprising:

## 12

a video circuit adapted to display an image based on the video signals sent by said externally connected video source;

a memory in which at least display unit information is stored, said display unit information including an identification number for identifying at least a type of said display unit; and

a communication controller capable of bi-directionally communicating with said video source;

wherein said communication controller is capable of communicating said identification number stored in said memory and no other display unit information to said video source.

18 The display unit according to claim 17, wherein said display unit information includes characteristic information of said display unit.

19 The display unit according to claim 18, wherein said display unit information is sent to said video source in response to power on of at least one of said display unit and said video source.

20 The display unit according to claim 18, wherein said display unit receives a signal from said video source that is generated by using said identification number stored in said memory.

21 A display unit for displaying an image based on video signals inputted from an externally connected video source, comprising:

a video circuit adapted to display an image based on the video signals sent by said externally connected video source;

a memory in which at least display unit information is stored, said display unit information including an identification number for identifying at least a type of said display unit; and

a communication controller capable of bi-directionally communicating with said video source;

wherein said communication controller is capable of sending said display unit information stored in said memory to said video source and of receiving a control signal from said video source, and said displayed image is controlled based on said control signal received by said communication controller.

22 The display unit according to claim 21, wherein at least one of color and size of said image displayed on said display unit is changed by using said control signal.

23 A display unit for displaying an image based on video signals inputted from an externally connected video source, comprising:

a video circuit adapted to display an image based on the video signals sent by said externally connected video source;

a memory in which at least display unit information is stored, said display unit information including an identification number for identifying at least a type of said display unit;

a communication controller capable of bi-directionally communicating with said video source, said communication controller being capable of sending said display unit information stored in said memory to said video source and of receiving a control signal from said video source; and

a processor adapted to control said displayed image on said display unit by using said control signal received by said communication controller.

24 The display unit according to claim 23, wherein at least one of color and size of said image displayed on said display unit is changed by using said control signal.

## 13

25. A display unit for displaying an image based on video signals inputted from an externally connected video source, comprising:

a video circuit adapted to display an image based on the video signals sent by said externally connected video source;

a processor adapted to control display of said display unit; a memory which stores an identification number for identifying at least a type of said display unit; and

a communication controller capable of bi-directionally communicating with said video source;

wherein said communication controller is capable of sending said identification number stored in said memory to said video source and of receiving a control signal received from said video source, and at least one of color and size of said displayed image on said display unit is controlled by using said control signal received by said communication controller.

26. A display unit for displaying an image based on video signals inputted from an externally connected video source, comprising:

a video circuit adapted to display an image based on the video signals sent by said externally connected video source;

## 14

a memory in which at least display unit information is stored, said display unit information including an identification number for identifying at least a type of said display unit; and

a communication controller capable of bi-directionally communicating with said video source;

wherein said communication controller is capable of communicating said display unit information from said display unit to said video source, said display unit being capable of receiving a signal from said video source that is generated based on said display unit information, said display unit being capable of controlling said displayed image on said display unit by using a control signal received from said video source via said communication controller.

27. The display unit according to claim 26, wherein at least one of color and size of said image displayed on said display unit is changed by using said control signal.

28. The display unit according to any one of claims 1-27, wherein said video source is a computer.

29. A display unit according to any one of claim 1, 14, 17, 21, 23, 25 and 26, wherein the identification number provides at least a unique identification of the type of said display unit.

\* \* \* \* \*



US007475180C1

(12) **EX PARTE REEXAMINATION CERTIFICATE** (10784th)  
**United States Patent**  
**Arai et al.**

(10) Number: **US 7,475,180 C1**(45) Certificate Issued: **Dec. 28, 2015**

(54) **DISPLAY UNIT WITH COMMUNICATION CONTROLLER AND MEMORY FOR STORING IDENTIFICATION NUMBER FOR IDENTIFYING DISPLAY UNIT**

(75) Inventors: **Ikuya Arai**, Yokohama (JP); **Kouji Kitou**, Yokohama (JP)

(73) Assignee: **MONDIS TECHNOLOGY LTD.**, Hampstead, London (GB)

(52) U.S. Cl.  
CPC **G06F 3/153** (2013.01); **G09G 1/16** (2016.01); **G09G 1/167** (2013.01); **G06F 3/1423** (2013.01); **G06F 3/1446** (2013.01); **G09G 2360/04** (2013.01); **G09G 2370/04** (2013.01); **G09G 2370/042** (2013.01)

(58) **Field of Classification Search**  
None

See application file for complete search history.

(56) **References Cited**

To view the complete listing of prior art documents cited during the proceedings for Reexamination Control Numbers 90/013,237 and 90/013,390, please refer to the USPTO's public Patent Application Information Retrieval (PAIR) system under the Display References tab.

Primary Examiner — Christopher E Lee

**Reexamination Request:**

No. 90/013,237, May 13, 2014

No. 90/013,390, Nov. 3, 2014

**Reexamination Certificate for:**

Patent No.: **7,475,180**

Issued: **Jun. 6, 2009**

Appl. No.: **10/160,022**

Filed: **Jun. 4, 2002**

**Related U.S. Application Data**

(63) Continuation of application No. 09/732,292, filed on Dec. 8, 2000, now Pat. No. 6,513,088, which is a continuation of application No. 09/265,363, filed on Mar. 10, 1999, now Pat. No. 6,247,090, which is a continuation of application No. 08/833,346, filed on Apr. 4, 1997, now Pat. No. 5,887,147, which is a continuation of application No. 08/598,903, filed on Feb. 9, 1996, now Pat. No. 5,652,845, which is a continuation of application No. 08/190,848, filed on Feb. 3, 1994, now abandoned.

(30) **Foreign Application Priority Data**

Feb. 10, 1993 (JP) ..... 5-022212

(51) **Int. Cl.**

**G06F 13/00** (2006.01)

**G06F 3/153** (2006.01)

**G09G 1/16** (2006.01)

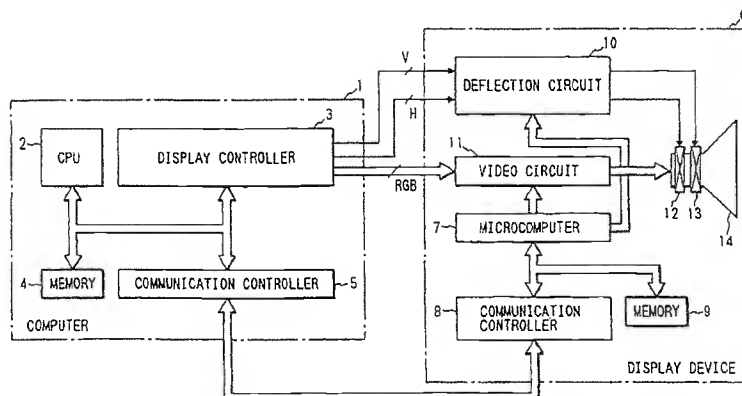
**G06F 3/14** (2006.01)

**ABSTRACT**

A display unit for displaying an image based on video signals and synchronization signals inputted from an externally connected video source, includes a video circuit adapted to display an image based on the video signals sent by the externally connected video source, a memory which stores an identification number for identifying the display unit, and a communication controller which sends the identification number stored in the memory to the video source. The communication controller is capable of bi-directionally communicating with the video source.

Attention is directed to the decision of *Mondis Technology, Ltd. v. Hon Hai Precision Industry Co., Ltd., et al.* No. 2012-1004 (Fed. Cir.), dated Mar. 13, 2013. This reexamination may not have resolved all questions raised by this decision. See 37 CFR 1.552(c) for *ex parte* reexamination and 37 CFR 1.906(c) for *inter partes* reexamination.

At the time of issuance and publication of this certificate, the patent remains subject to pending reexamination control numbers 95/000,480 and 90/013,481 filed Jun. 4, 2009 and Mar. 27, 2015 respectively. The claim content of the patent may be subsequently revised if a reexamination certificate issues from the reexamination proceedings.



**1**  
**EX PARTE**  
**REEXAMINATION CERTIFICATE**

**2**

THE PATENT IS HEREBY AMENDED AS  
INDICATED BELOW. <sup>5</sup>

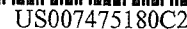
AS A RESULT OF REEXAMINATION, IT HAS BEEN  
DETERMINED THAT:

The patentability of claims **14-16, 28** and **29** is confirmed. <sup>10</sup>

Claims **17-20, 23** and **24** are cancelled.

Claims **1-13, 21, 22** and **25-27** were not reexamined.

\* \* \* \* \*



# United States Patent

(10) **Number:** **US 7,475,180 C2**

3/1446 (2013.01); G09G 2360/04 (2013.01);  
G09G 2370/04 (2013.01); G09G 2370/042  
(2013.01)

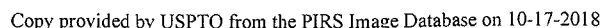
(58) **Field of Classification Search**  
USPC ..... 710/305  
See application file for complete search history.

(56) **References Cited**(57) **ABSTRACT**

A display unit for displaying an image based on video signals and synchronization signals inputted from an externally connected video source, includes a video circuit adapted to display an image based on the video signals sent by the externally connected video source, a memory which stores an identification number for identifying the display unit, and a communication controller which sends the identification number stored in the memory to the video source. The communication controller is capable of bi-directionally communicating with the video source.

Attention is directed to the decision of Federal Circuit's March 13, 2013 the parties' to dismiss the appeal. *Mondis Technology, Ltd. v. Hon Hai Precision Industry Co., Ltd., et al., No. 2012-1004 (Fed. Cir.)*, dated March 13, 2013 relating to this patent. This reexamination may not have resolved all questions raised by this decision. See 37 CFR 1.552(c) for *ex parte* reexamination and 37 CFR 1.906(c) for *inter partes* reexamination.

At the time of issuance and publication of this certificate, the patent remains subject to pending reexamination control number 90/013,481 filed Mar. 27, 2015. The claim content of the patent may be subsequently revised if a reexamination certificate issues from the reexamination proceeding.



1  
**INTER PARTES  
REEXAMINATION CERTIFICATE**

2

THE PATENT IS HEREBY AMENDED AS  
INDICATED BELOW. 5

AS A RESULT OF REEXAMINATION, IT HAS BEEN  
DETERMINED THAT:

Claims 17-20, 23, 24, 28/18, 28/19, 28/20, 28/23, 28/24, 10  
29/17 and 29/23 were previously cancelled.

Claims 1-13, 21, 22, 25-27, 28/1-13, 28/21, 28/22, 28/25,  
28/26, 28/27, 29/1, 29/21, 29/25 and 29/26 are cancelled.

Claims 14-16, 28/14, 28/15, 28/16 and 29/14 were not 15  
reexamined.

\* \* \* \* \*



US007475180C3

(12) **EX PARTE REEXAMINATION CERTIFICATE** (10903rd)**United States Patent****Arai et al.**(10) **Number:** **US 7,475,180 C3**(45) **Certificate Issued:** **Jun. 28, 2016**(54) **DISPLAY UNIT WITH COMMUNICATION CONTROLLER AND MEMORY FOR STORING IDENTIFICATION NUMBER FOR IDENTIFYING DISPLAY UNIT**(75) Inventors: **Ikuya Arai**, Yokohama (JP); **Kouji Kitou**, Yokohama (JP)(73) Assignee: **MONDIS TECHNOLOGY LTD.**, Hampstead, London (GB)**Reexamination Request:**

No. 90/013,481, Mar. 27, 2015

**Reexamination Certificate for:**

Patent No.: **7,475,180**  
 Issued: **Jan. 6, 2009**  
 Appl. No.: **10/160,022**  
 Filed: **Jun. 4, 2002**

Reexamination Certificate C1 7,475,180 issued Dec. 28, 2015

Reexamination Certificate C2 7,475,180 issued Jun. 6, 2016

**Related U.S. Application Data**

(63) Continuation of application No. 09/732,292, filed on Dec. 8, 2000, now Pat. No. 6,513,088, which is a continuation of application No. 09/265,363, filed on Mar. 10, 1999, now Pat. No. 6,247,090, which is a continuation of application No. 08/833,346, filed on Apr. 4, 1997, now Pat. No. 5,887,147, which is a continuation of application No. 08/598,903, filed on Feb. 9, 1996, now Pat. No. 5,652,845, which is a continuation of application No. 08/190,848, filed on Feb. 3, 1994, now abandoned.

(30) **Foreign Application Priority Data**

Feb. 10, 1993 (JP) ..... 5-022212

(51) **Int. Cl.**

**G06F 13/00** (2006.01)  
**G06F 3/153** (2006.01)

**G09G 1/16** (2006.01)**G06F 3/14** (2006.01)(52) **U.S. Cl.**

CPC ..... **G06F 3/153** (2013.01); **G09G 1/167** (2013.01); **G06F 3/1423** (2013.01); **G06F 3/1446** (2013.01); **G09G 2360/04** (2013.01); **G09G 2370/04** (2013.01); **G09G 2370/042** (2013.01)

(58) **Field of Classification Search**

None

See application file for complete search history.

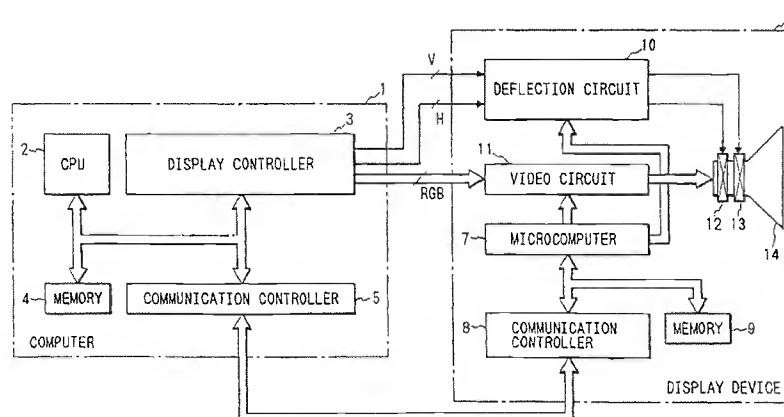
(56) **References Cited**

To view the complete listing of prior art documents cited during the proceeding for Reexamination Control Number 90/013,481, please refer to the USPTO's public Patent Application Information Retrieval (PAIR) system under the Display References tab.

*Primary Examiner* — Christopher E. Lee(57) **ABSTRACT**

A display unit for displaying an image based on video signals and synchronization signals inputted from an externally connected video source, includes a video circuit adapted to display an image based on the video signals sent by the externally connected video source, a memory which stores an identification number for identifying the display unit, and a communication controller which sends the identification number stored in the memory to the video source. The communication controller is capable of bi-directionally communicating with the video source.

Attention is directed to the decision of Federal Circuit's March 13, 2013 the parties' to dismiss the appeal. *Order, Mondis Technology, Ltd. v. Hon Hai Precision Industry Co., Ltd., et al.*, No. 2012-1004 (Fed. Cir.), dated March 13, 2013 relating to this patent. This reexamination may not have resolved all questions raised by this decision. See 37 CFR 1.552(c) for *ex parte* reexamination and 37 CFR 1.906(c) for *inter partes* reexamination.



**EX PARTE  
REEXAMINATION CERTIFICATE**

NO AMENDMENTS HAVE BEEN MADE TO  
THE PATENT 5

AS A RESULT OF REEXAMINATION, IT HAS BEEN  
DETERMINED THAT:

The patentability of claims 14-16, 28/14, 28/15, 28/16 and 10  
29/14 is confirmed.

Claims 1-13, 17-27, 28/1-13, 28/17-27, 29/1, 29/17, 29/21,  
29/23, 29/25 and 29/26 were previously cancelled.

\* \* \* \* \*





US007475180C4

(12) **EX PARTE REEXAMINATION CERTIFICATE** (11089th)

**United States Patent**

Arai et al.

(10) Number: **US 7,475,180 C4**(45) Certificate Issued: **Apr. 18, 2017**

(54) **DISPLAY UNIT WITH COMMUNICATION CONTROLLER AND MEMORY FOR STORING IDENTIFICATION NUMBER FOR IDENTIFYING DISPLAY UNIT**

(75) Inventors: **Ikuya Arai**, Yokohama (JP); **Kouji Kitou**, Yokohama (JP)

(73) Assignee: **MONDIS TECHNOLOGY LTD.**, Hampstead, London (GB)

**Reexamination Request:**

No. 90/013,784, Jul. 22, 2016

**Reexamination Certificate for:**

Patent No.: **7,475,180**  
Issued: **Jan. 6, 2009**  
Appl. No.: **10/160,022**  
Filed: **Jun. 4, 2002**

Reexamination Certificate C1 7,475,180 issued Dec. 28, 2015

Reexamination Certificate C2 7,475,180 issued Jun. 6, 2016

Reexamination Certificate C3 7,475,180 issued Jun. 28, 2016

**Related U.S. Application Data**

(63) Continuation of application No. 09/732,292, filed on Dec. 8, 2000, now Pat. No. 6,513,088, which is a continuation of application No. 09/265,363, filed on Mar. 10, 1999, now Pat. No. 6,247,090, which is a continuation of application No. 08/833,346, filed on Apr. 4, 1997, now Pat. No. 5,887,147, which is a continuation of application No. 08/598,903, filed on Feb. 9, 1996, now Pat. No. 5,652,845, which is a continuation of application No. 08/190,848, filed on Feb. 3, 1994, now abandoned.

**(30) Foreign Application Priority Data**

Feb. 10, 1993 (JP) ..... 5-022212

(51) **Int. Cl.**  
**G06F 13/00** (2006.01)  
**G06F 3/153** (2006.01)

**G09G 1/16** (2006.01)**G06F 3/14** (2006.01)(52) **U.S. Cl.**

CPC ..... **G06F 3/153** (2013.01); **G09G 1/167** (2013.01); **G06F 3/1423** (2013.01); **G06F 3/1446** (2013.01); **G09G 2360/04** (2013.01); **G09G 2370/04** (2013.01); **G09G 2370/042** (2013.01)

(58) **Field of Classification Search**

None

See application file for complete search history.

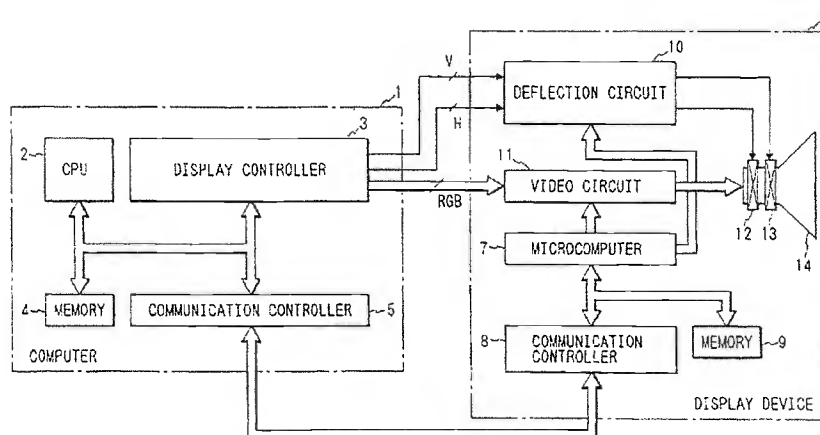
(56) **References Cited**

To view the complete listing of prior art documents cited during the proceeding for Reexamination Control Number 90/013,784, please refer to the USPTO's public Patent Application Information Retrieval (PAIR) system under the Display References tab.

*Primary Examiner* — Matthew Heneghan(57) **ABSTRACT**

A display unit for displaying an image based on video signals and synchronization signals inputted from an externally connected video source, includes a video circuit adapted to display an image based on the video signals sent by the externally connected video source, a memory which stores an identification number for identifying the display unit, and a communication controller which sends the identification number stored in the memory to the video source. The communication controller is capable of bi-directionally communicating with the video source.

Attention is directed to the decision of *Mondis Technology, Ltd. v. Hon Hai Precision Industry Co., et al.* No. 2012-1004 (Fed. Cir.), dated Mar. 13, 2013 relating to this patent. This reexamination may not have resolved all questions raised by this decision. See 37 CFR 1.552(c) for *ex parte* reexamination and 37 CFR 1.906(c) for *inter partes* reexamination.



**EX PARTE  
REEXAMINATION CERTIFICATE**

NO AMENDMENTS HAVE BEEN MADE TO  
THE PATENT 5

AS A RESULT OF REEXAMINATION, IT HAS BEEN  
DETERMINED THAT:

The patentability of claims ~~14-16~~, ~~28/14-16~~ and ~~29/14~~ is 10  
confirmed.

Claims ~~1-13~~, ~~17-27~~, ~~28/1-13~~, ~~28/17-27~~, ~~29/1~~, ~~29/17~~,  
~~29/21~~, ~~29/23~~, ~~29/25~~ and ~~29/26~~ were previously cancelled.

\* \* \* \* \*

UNITED STATES OF AMERICA  
DISTRICT OF NEW JERSEY

<p><u>MONDIS TECHNOLOGY, LTD.,</u> HITACHI MAXELL, LTD., n/k/a MAXELL HOLDINGS, LTD., and MAXELL LTD.,</p> <p style="text-align: center;">Plaintiffs,</p> <p style="text-align: center;">vs</p> <p>LG ELECTRONICS, INC., and LG ELECTRONICS U.S.A., INC.,</p> <p style="text-align: center;">Defendants.</p>	<p>CIVIL NUMBER:  2:15-cv-04431-SRC-CLW</p> <p>JURY TRIAL  (Vol. 2)</p> <p>Pages 204 - 333</p>
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Frank R. Lautenberg Post Office and United States Courthouse  
Two Federal Square  
Newark, New Jersey 07102  
February 7, 2023  
Commencing at 9:30 a.m.

B E F O R E:

THE HONORABLE STANLEY R. CHESLER,  
UNITED STATES DISTRICT JUDGE,  
AND A JURY

Proceedings recorded by mechanical stenography.  
Transcript produced by computer-aided transcription.

Tammera M. Witte, Official Court Reporter  
tammera\_witte@njd.uscourts.gov  
(973) 457-8230

**A P P E A R A N C E S:**

DECHERT, LLP  
Cira Centre, 2929 Arch Street  
Philadelphia, Pennsylvania 19104  
BY: MARTIN J. BLACK, ESQUIRE  
BRIAN M. GOLDBERG, ESQUIRE  
JEFFREY S. EDWARDS, ESQUIRE

- and -

JEFFREY B. PLIES, ESQUIRE  
515 Congress Avenue, Suite 1400  
Austin, Texas 78701  
Attorneys for the Plaintiffs Mondis Technology Ltd.,  
Hitachi Maxell, Ltd., n/k/a MAXELL HOLDINGS, LTD.,  
and Maxell Ltd.

WALSH, PIZZI, O'REILLY, FALANGA, LLP  
Three Gateway Center, 100 Mulberry Street, 15th Flr.  
Newark, New Jersey 07102  
BY: LIZA M. WALSH, ESQUIRE

- and -

FISH & RICHARDSON, PC  
1000 Maine Avenue SW, Suite 1000  
Washington, DC 20024  
BY: MICHAEL J. MC KEON, ESQUIRE  
R. ANDREW SCHWENTKER, ESQUIRE  
CHRISTIAN A. CHU, ESQUIRE  
MICHAEL J. BALLANCO, ESQUIRE  
Attorneys for Defendants LG Electronics Inc. and  
LG Electronics U.S.A., Inc.

09:42 1 THE COURT: You can argue, indeed, that there would  
09:42 2 have been a three-time multiplier.

09:42 3 MR. BLACK: Great.

09:42 4 And then with respect to the divisor, what I intend to  
09:42 5 say to the jury, if you'll allow me, is the following: The law  
09:42 6 requires that you apportion out from the '090 patent family the  
09:42 7 value of the '180. Mr. Hansen used the divisor of six in one  
09:43 8 agreement, five in another. You must make an adjustment. You  
09:43 9 are allowed, though, to consider Mr. Lamm's testimony that the  
09:43 10 '180 is the most valuable in the family.

09:43 11 THE COURT: You may.

09:43 12 MR. BLACK: Okay.

09:43 13 THE COURT: Have you dealt with all your issues?

09:43 14 MR. BLACK: Yes, Your Honor.

09:43 15 MR. MC KEON: Thank you, Your Honor.

09:43 16 THE COURT: Let's get Mr. Hansen back up on the stand  
09:43 17 and get the jury in.

09:43 18 MR. BLACK: I won't do the math. Can I use this  
09:43 19 slide, which was 30, then? I'm sorry. I think that's  
09:43 20 consistent with what I just said. I would say you may consider  
09:43 21 these facts that LG says 126. We think the negotiation would  
09:43 22 have been 518. They say .25. We think .75.

09:44 23 THE COURT: At this point, no. Okay. Let's see how  
09:44 24 the further examination of Mr. Hansen goes, but at this point  
09:44 25 that's essentially doing what your other slide does. It's

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1 doing the math for them.

2 MR. BLACK: Okay. Can I -- well, okay. I'm allowed

3 to say that -- that the negotiation, Mr. Spiro would have

4 presented the 518 and the .75 percent, and they would have had

5 Mr. Lamm's evidence that the '180 is really important, you must

6 apportion -- you've got -- I can do that. I just can't use the

7 slides. Is that --

8 THE COURT: That, you can do.

9 MR. BLACK: Okay.

10 THE COURT: Let's go.

11 (Jury enters at 9:45 a.m.)

12 THE COURT: Good morning, ladies and gentlemen. I

13 hope you had a wonderful evening and are raring to go. I can

14 see by the looks on your faces that you are raring to go, so

15 let's proceed.

16 (FURTHER DIRECT EXAMINATION)

17 BY MR. BALLANCO:

18 Q. Good morning, Mr. Hansen.

19 A. Good morning.

20 Q. Just to orient us as to where we were yesterday when we

21 left off, you had provided the jury with a few data points

22 based on prior Mondis agreements, on Georgia-Pacific factor

23 one, and we had just discussed Georgia-Pacific factor five

24 where you had spoken about why LG would not want to be at a

25 disadvantage relative to its competitors. Right?

# UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

## CERTIFICATE OF SERVICE

**Case Number** 23-2117, 23-2116

**Short Case Caption** Mondis Technology Ltd. v. LG Electronics Inc.

**NOTE:** Proof of service is only required when the rules specify that service must be accomplished outside the court's electronic filing system. See Fed. R. App. P. 25(d); Fed. Cir. R. 25(e). Attach additional pages as needed.

I certify that I served a copy of the foregoing filing on 12/05/2023

by ☐ U.S. Mail ☐ Hand Delivery ☒ Email ☐ Facsimile  
☐ Other: \_\_\_\_\_

on the below individuals at the following locations.

Person Served	Service Location (Address, Facsimile, Email)
Michael J. McKeon Fish & Richardson P.C.	mckeon@fr.com
Christian A. Chu Fish & Richardson P.C.	chu@fr.com
Andrew Schwentker Fish & Richardson P.C.	schwentker@fr.com
Michael J. Ballanco Fish & Richardson P.C.	ballanco@fr.com

☐ Additional pages attached.

Date: 12/05/2023

Signature: /s/ Martin J. Black

Name: Martin J. Black

**UNITED STATES COURT OF APPEALS  
FOR THE FEDERAL CIRCUIT****CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITATIONS****Case Number:** 23-2117 (lead); 23-2116**Short Case Caption:** Mondis Technology Ltd. v. LG Electronics Inc.**Instructions:** When computing a word, line, or page count, you may exclude any items listed as exempted under Fed. R. App. P. 5(c), Fed. R. App. P. 21(d), Fed. R. App. P. 27(d)(2), Fed. R. App. P. 32(f), or Fed. Cir. R. 32(b)(2).

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Date: 12/05/2023Signature: /s/ Martin J. BlackName: Martin J. Black



**UNITED STATES COURT OF APPEALS  
FOR THE FEDERAL CIRCUIT****CERTIFICATE OF CONFIDENTIAL MATERIAL****Case Number:** 23-2117 (lead); 23-2116**Short Case Caption:** Mondis Technology Ltd. v. LG Electronics Inc.

**Instructions:** When computing a confidential word count, Fed. Cir. R. 25.1(d)(1)(C) applies the following exclusions:

- Only count each unique word or number once (repeated uses of the same word do not count more than once).
- For a responsive filing, do not count words marked confidential for the first time in the preceding filing.

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- ☒ This number exceeds the maximum permitted by Federal Circuit Rule 25.1(d)(1), and the filing is accompanied by a motion to waive the confidentiality requirements.

Date: 12/05/2023Signature: /s/ Martin J. BlackName: Martin J. Black